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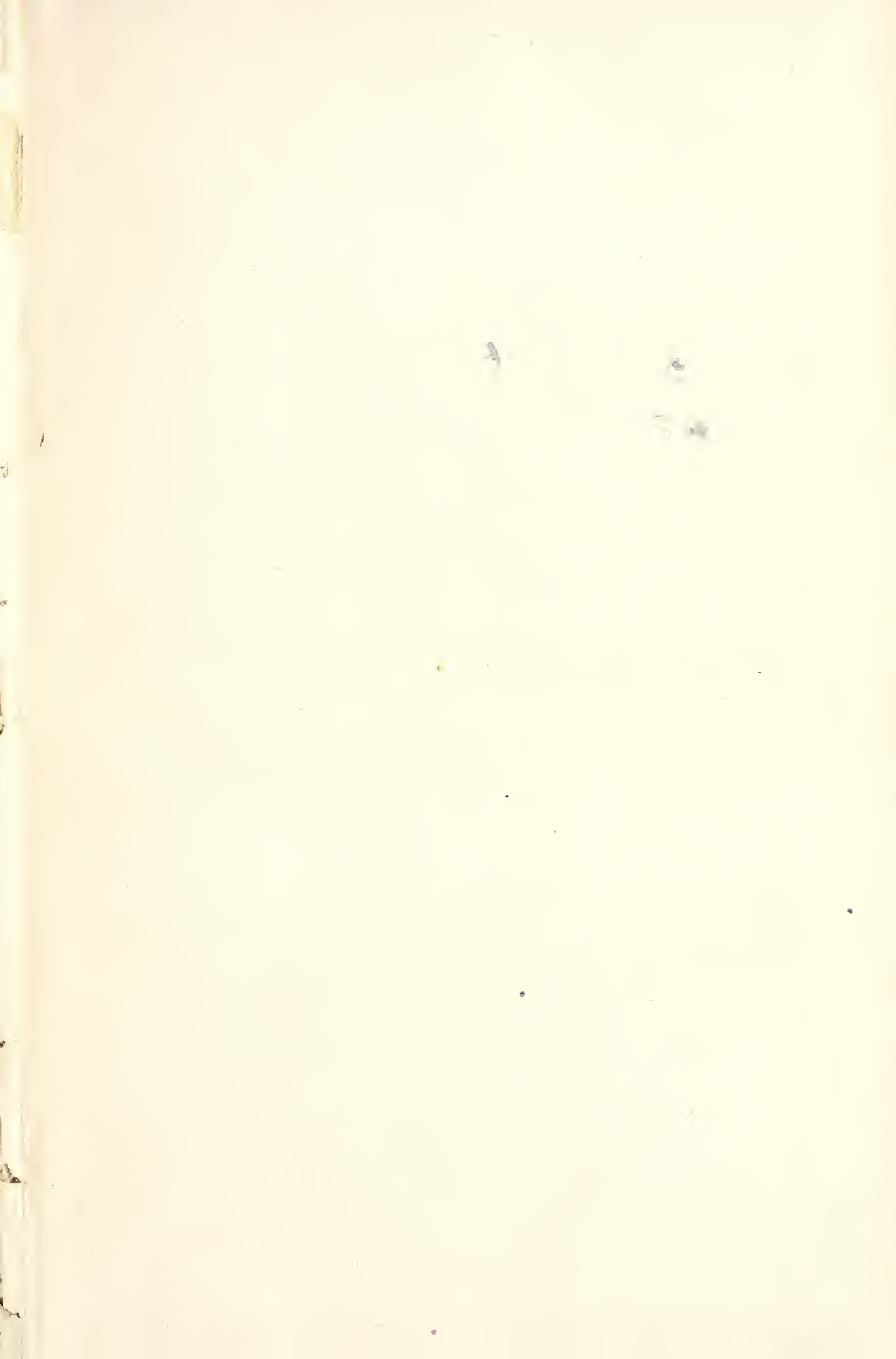
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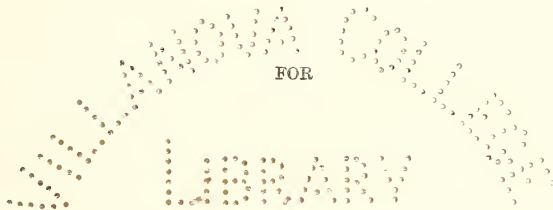


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REPORT

OF THE

COMMISSIONER OF EDUCATION

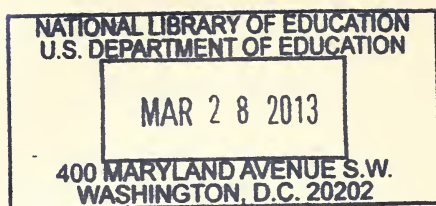


THE YEAR 1900-1901.

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VOLUME 1.

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THE UNITED STATES
BUREAU OF EDUCATION,

Created as a Department March 2, 1867.

Made an Office of the Interior Department July 1, 1869.

COMMISSIONERS.

HENRY BARNARD, LL. D.,

March 14, 1867, to March 15, 1870.

JOHN EATON, PH. D., LL. D.,

March 16, 1870, to August 5, 1886.

NATHANIEL H. R. DAWSON, L. H. D.,

August 6, 1886, to September 3, 1889.

WILLIAM T. HARRIS, PH. D., LL. D.,

September 12, 1889, to date.

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REPORT OF THE COMMISSIONER OF EDUCATION.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, D. C., October 1, 1901.

SIR: I have the honor to submit herewith the Annual Report of this Office for the year ending June 30, 1901.

There were enrolled in schools and colleges, public and private, during the year 1900-1901, 17,299,230 pupils, the same being an increase of 278,520 pupils over the previous year.

Of this number the enrollment in public institutions—that is to say, institutions supported by taxation and funds belonging to States and municipalities—was 15,710,394, as against 15,443,462, the number reported for the previous year.

Besides the enrollment in schools and colleges of the prevailing type, as given above, there were pupils enrolled in special institutions of varying degrees of educational character, from the city evening schools, business schools, and schools for Indians, all of which approach nearly the type of the common schools, to schools for cookery, reform schools, schools for special trades and vocations, which depart more widely from the common type of school, as follows:

Enrollment in special schools, 1900-1901.

City evening schools	203,000
Business schools	110,031
Schools for defectives	27,159
Reform schools	25,337
Government Indian schools	23,077
Indian schools (Five Civilized Tribes)	11,590
Schools in Alaska supported by the Government	1,963
Schools in Alaska supported by incorporated municipalities (partly estimated)	1,393
Orphan asylums and other benevolent institutions	15,000
Private kindergartens	95,000
Miscellaneous (including schools of music, oratory, elocution, cookery, and various special arts)	50,000
Total	563,550

Adding the enrollment in these special schools to the total of schools giving general education we have a total of 17,862,780.

The general items of statistics for the country as a whole and for the five census divisions may be seen in the following three tables.

In Table I is given a comparative summary of items of attendance of pupils, teaching force, and receipts and expenditures, showing the increase from decade to decade for thirty years and more in what are called "common schools," that is to say, schools of elementary and secondary grades supported from public funds.

It will be seen that the average length of school term in days has increased from 132.2 days in 1870 to 144.2 the past year. But there is a slight decrease from the previous year (1900) in this respect, amounting to three-tenths of a day.

The number of women teachers has reached 306,063, from 122,986 thirty-one years ago. The number of male teachers was 77,529 in 1870 and reached 132,257 in 1898, from which it has declined in three years to 123,941. The ratio of male to female teachers has declined from 42.8 in 1880 to 28.8 per cent in 1901. This preponderance of women teachers is due largely to the fact that three-fourths of all the pupils are in the first four years' work of the elementary schools, and to the fact that women are to be preferred over men for instruction of children under ten years of age.

It will be seen that the aggregate of school property is nearly \$577,000,000, having increased to that amount from \$130,000,000 reported in 1870.

The income from local taxes has increased to \$161,245,764 the past year, from \$97,222,426 in 1890.

TABLE I.—Common school statistics of the United States.

	1869-70.	1879-80.	1889-90.	1895-96.	1896-97.	1897-98.	1898-99.	1899-1900. ^a	1900-1901. ^a
I.—General statistics.									
Total population	6,985,558,371	6,501,155,783	6,622,622,250	6,701,277,242	6,711,445,273	6,727,792,617	6,741,178,966	6,751,602,515	6,771,262,743
Persons 5 to 18 years of age	612,053,443	615,065,767	618,543,201	620,194,310	620,484,160	620,782,210	621,090,070	621,404,322	621,697,678
Pupils enrolled (duplicates excluded) ..	6,871,322	9,867,546	12,122,381	14,498,456	14,533,059	15,163,874	15,176,219	15,465,010	15,603,451
Per cent of total population enrolled ..	17.82	19.37	20.32	21.63	20.75	20.75	20.46	20.46	20.30
Per cent of persons 5 to 18 years of age enrolled ..	57.00	65.50	68.61	71.80	72.26	72.68	71.96	72.25	71.26
Average daily attendance	4,077,341	6,144,343	8,153,035	9,781,475	10,052,554	10,356,458	10,338,386	10,506,511	10,632,091
Relation of same to enrollment (per cent) ..	59.3	62.3	64.1	67.5	67.8	68.6	68.1	68.5	68.3
Average length of school term (days) ..	132.2	131.3	131.7	132.0	132.0	132.0	131.0	131.5	134.2
Total number of days attended by all pupils ..	539,053,423	800,719,970	1,098,232,725	1,374,732,974	1,427,402,478	1,480,406,044	1,477,016,244	1,531,566,784	1,542,074,801
Average number of days attended by each person 5 to 18 ..	44.7	53.1	59.2	68.1	69.7	71.2	70.0	71.6	70.4
Average number attended by each pupil enrolled	78.4	81.1	86.3	94.8	96.3	98.0	97.3	99.0	98.8
Male teachers	77,589	122,705	135,525	130,373	131,221	132,257	131,207	126,144	123,941
Female teachers	122,986	163,798	238,337	269,923	273,757	278,556	283,065	296,463	303,063
Whole number of teachers	200,515	286,503	363,822	400,296	404,958	410,813	414,272	422,607	430,004
Per cent of male teachers	38.7	42.8	34.5	32.6	32.4	32.2	31.7	30.9	28.8
Average monthly wages of male teachers ^d ..				\$47.37	\$44.02	\$45.16	\$45.25	\$46.53	\$47.55
Average monthly wages of female teachers ^d ..				\$40.24	\$38.38	\$38.74	\$38.14	\$38.63	\$39.17
Number of schoolhouses ^e	116,312	178,222	224,536	242,538	243,753	242,301	244,833	248,250	249,969
Value of all school property	\$130,383,008	\$200,571,718	\$342,351,791	\$459,581,687	\$477,321,190	\$495,912,043	\$523,679,996	\$549,693,145	\$576,863,089
II.—Financial statistics.									
Receipts:									
From income of permanent funds and rents									
From State taxes			\$7,744,765	\$7,990,939	\$9,047,097	\$9,333,554	\$9,007,887	\$9,139,689	\$9,823,482
From local taxes			26,345,323	35,032,253	33,041,657	35,122,095	35,341,094	37,854,406	38,476,250
From all other sources			97,229,426	124,879,406	130,317,708	135,515,785	144,397,878	149,504,711	161,245,764
Total received			11,882,292	14,606,573	18,652,908	19,862,008	14,090,384	23,230,680	25,422,423
Per cent of total derived from—									
Income of permanent funds and rents			5.4	4.4	4.7	4.7	4.4	4.2	4.2
State taxes			18.4	19.2	17.7	17.6	17.4	16.4	16.4
Local taxes			67.9	68.4	67.9	67.8	71.3	68.6	68.6
All other sources			8.3	8.0	9.7	9.9	6.9	10.6	10.8

^a The figures for this year are subject to correction.^b Estimated^c Several States are not included in this average.^d Including buildings rented.

TABLE I.—Common school statistics of the United States—Continued.

	1869-70.	1879-80.	1889-90.	1895-96.	1896-97.	1897-98.	1898-99.	1899-1900.	1900-1901.
II.—Financial statistics—Continued.									
Expenditures:									
For sites, buildings, furniture, libraries, and apparatus.....			\$26,207,041	\$22,590,112	\$22,376,476	\$31,415,233	\$31,222,308	\$35,490,969	\$40,351,904
For salaries of superintendents and teachers.....	\$37,892,546	\$55,942,972	91,839,484 22,463,130	117,139,841 33,769,012	119,310,503 35,995,200	124,102,270 58,083,408	129,345,873 39,579,416	137,500,050 41,816,699	142,776,198 42,965,104
For all other purposes.....									
Total expended.....	63,396,695	78,094,687	140,506,715	183,498,965	187,682,279	194,232,911	200,154,597	214,897,718	226,043,236
Expenditure per capita of population.....	\$1.64	\$1.56	\$2.24	\$2.62	\$2.03	\$2.67	\$2.70	\$2.84	\$2.93
Expenditure per pupil (of average attendance):									
For sites, buildings, etc.....			\$3.21	\$3.33	\$3.22	\$3.03	\$3.03	\$3.35	\$3.77
For salaries.....	\$9.28	\$9.10	11.26	11.98	11.87	11.49	12.32	12.98	13.53
For all other purposes.....			2.76	3.45	3.58	3.74	3.83	3.95	4.02
Total expenditure per pupil.....	15.55	12.71	17.23	18.76	18.67	18.76	19.38	20.28	21.14
Per cent of expenditure devoted to—									
Sites, buildings, etc.....			18.6	17.8	17.3	16.2	15.6	16.5	17.8
Salaries.....	59.7	71.6	65.4	63.8	63.6	63.9	64.6	64.0	63.2
All other purposes.....			16.0	18.4	19.1	19.9	19.8	19.5	19.0
Average expenditure per day for each pupil (cents):									
For salaries.....	7.0	7.0	8.4	8.5	8.4	8.4	8.8	9.0	9.3
For all purposes.....	11.8	9.7	12.8	13.3	13.1	13.1	13.6	14.0	14.7

TABLE II.—Number of pupils and students of all grades in both public and private schools and colleges, 1900-1901.

NOTE.—The classification of States made use of in the following table is the same as that adopted by the United States census, and is as follows: *North Atlantic Division*: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, and Pennsylvania. *South Atlantic Division*: Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, and Florida. *South Central Division*: Kentucky, Tennessee, Alabama, Mississippi, Louisiana, Texas, Arkansas, Oklahoma, and Indian Territory. *North Central Division*: Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas. *Western Division*: Montana, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Idaho, Washington, Oregon, and California.

Division.	Pupils receiving elementary instruction (primary and grammar grades).			Pupils receiving secondary instruction (high-school grades). ^a		In universities and colleges. ^c		Students receiving higher instruction.				In normal schools. ^g		Total higher.	
	Public.	Private (largely estimated).	3	4	5	6	7	8	In schools of medicine, law, and theology. ^e			Public.	Private.	Total.	Public. Private.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
The United States.	15,061,721	1,261,672	558,740	177,290	36,201	79,070	115,271	10,380	50,804	61,164	43,372	20,630	463,402	89,933	149,904
North Atlantic Division.	3,323,087	526,950	178,322	55,690	5,442	30,477	35,919	205	17,728	17,933	15,301	1,030	16,381	20,948	49,235
South Atlantic Division.	2,161,195	111,344	30,569	28,246	4,352	10,727	15,079	1,325	6,228	7,553	4,197	1,216	5,413	9,874	18,171
South Central Division.	2,960,594	162,614	44,886	32,643	3,642	11,542	15,184	1,340	5,919	7,259	4,261	2,574	6,835	9,243	20,035
North Central Division.	5,265,725	406,562	299,890	49,640	17,382	23,253	40,615	6,586	19,164	21,710	16,363	15,092	31,965	40,331	57,369
Western Division.	3,811,120	57,202	33,133	10,701	5,383	3,061	8,474	904	1,755	2,639	3,250	208	3,458	9,537	5,064

^aIncluding pupils in preparatory or academic departments of higher institutions, public and private, and excluding elementary pupils, who are classed in columns 2 and 3. ^bA classification of public and of private secondary students, according to the character of the institutions in which they are found, is given in Chap. XXIX, vol. 2.

^cThis is made up from the returns of individual high schools to the Bureau, and is somewhat too small, as there are many secondary pupils outside the completely organized high schools whom there are no means of enumerating. ^dColleges to which there are no means of enumerating. ^eColleges to which there are no means of enumerating. ^fColleges to which there are no means of enumerating. ^gColleges to which there are no means of enumerating.

^hMainly State universities, and colleges, and preparatory departments are also excluded, being tabulated in columns 4 and 5. ⁱMainly State universities, and colleges, and preparatory departments are also excluded, being tabulated in columns 4 and 5.

^jIncluding schools of dentistry, pharmacy, and mechanical colleges. ^kMainly in schools or departments of medicine and law attached to State universities. ^lNonprofessional pupils in normal schools are included in columns 4 and 5. ^mThere are, in addition to this number, 30,755 students taking normal courses in universities, colleges, and public and private high schools. (See Chap. XXXVII, vol. 2).

TABLE II.—*Number of pupils and students of all grades in both public and private schools and colleges, 1900-1901—Continued.*

Division.	Summary of pupils by grade.			Summary according to control.		Grand total.	Percent in each grade of the whole number of pupils.			Per cent of public pupils.			Per cent of the total population enrolled in each grade.		
	Elementary.	Secondary.	Higher.	Public.	Private.		Elementary.	Secondary.	Higher.	Elementary.	Secondary.	Higher.	Elementary.	Secondary.	Total.
I	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31 32
The United States.	16,323,353	736,060	239,837	15,710,384	1,588,836	17,299,230	94.36	4.25	1.39	92.27	75.92	37.50	21.13	0.95	22.39
North Atlantic Division.	4,050,057	294,252	70,183	3,722,357	652,115	4,354,472	93.01	5.38	1.61	86.99	76.12	29.85	18.89	1.09	20.31
South Atlantic Division.	2,302,539	58,915	28,045	2,231,638	157,861	2,389,499	96.36	2.47	1.17	95.16	51.89	35.21	21.84	0.53	22.67
South Central Division.	3,143,208	77,529	29,278	3,034,723	215,292	3,250,015	96.71	2.39	0.90	94.83	57.90	31.57	22.04	0.54	22.79
North Central Division.	5,969,287	319,470	97,730	5,875,886	510,601	6,386,487	93.47	5.00	1.53	93.24	84.46	41.27	22.27	1.19	23.82
Western Division.....	558,322	45,834	14,601	534,730	72,967	607,697	93.42	4.99	1.59	93.34	76.65	65.32	20.38	1.09	21.82

In the following table (Table IIIa) I have shown the variation of increase of the school system in the United States for the past twelve years. The entire increase in eleven years has been 2,786,452, the same being an average of 253,314 per annum. I have shown in the fourth column the per cent of increase over the previous year in order to indicate the irregularities from year to year. Some of these irregularities are doubtless due to carelessness in the preparation of returns made to this Office. These irregularities are of such a nature as to be corrected in some cases in the following year, and in some cases in the third or fourth year afterwards, so that the average for four years will eliminate irregularities that arise from error in the collection and tabulation of the details of the statistical aggregate. In one year the annual increase may be a little too large, in another too small; but after making allowance for errors of this description the evidence remains that there exists an actual variation of considerable importance in school attendance from one year to another, and in some cases it is easy to assign a cause.

Up to 1893 there had been a great increase of productive industry in the way of manufacture and transportation. The increase had begun as early as in 1880, and with the development of new and higher fields of manufacture and transportation there had been a call upon the laborers in the general trades for alert and skillful workmen for the new positions created. The most skillful blacksmiths were invited to step up higher into the new situations opened for a higher order of metal work. In the same way the vast army of carpenters had been drawn upon for their most skillful laborers to fill places in establishments doing cabinetwork and the higher orders of wood manufacture.

This same change had taken place in transportation. The larger combination the more places for intelligent skill and productive power. The farms had been drawn upon for their most intelligent youth to leave the plow and take up manufactures in wood, in metal, in leather, or in textiles. When business is very good it is apt to be the case that the older youth leave the school and take their places in the ranks of productive industry. This is what happened in the years directly preceding 1893. On the first check to productive industry the less skillful laborers are likely to be thrown out of employment. A manager prefers to keep his most skillful laborers. A parent also prefers to send his youngest sons back to school, if he has been obliged for lack of help to withdraw them prematurely, and his stress is now relieved. This explains how it is that there was a sudden annual increase of nearly 400,000 pupils enrolled in the year ending June, 1893. It is probable that the excess that was enrolled was chiefly in the spring and summer, but it seems to have continued the whole of the next year, because the increase of the next year is nearly half a million. But with the long continuation of hard times the parent

begins to withdraw again his older youth from school in order that they may assist in the support of the family, although it be by means of poorly remunerated industries.

In columns 5, 6, and 7 the specialist on State systems in this Office has prepared a careful estimate of the increase of the population of the United States from year to year for purposes of comparison. And it would seem that the average annual increase of 1.61 per cent in the enrollment of pupils over that for the previous year is surpassed in the general population, which amounts to 1.93 per cent. The attendance on schools in the decade 1890-1900 has not quite equaled in its ratio of increase that of the entire population. This ten years' change of rate, however, corresponds to a decrease of only 0.67 of 1 per cent in the proportion of the population receiving education (see Table III*b*), and in my opinion this is due chiefly to a gradual improvement in the methods of collecting and tabulating statistics of the rural portions of the country, many of which were formerly in the habit of adding the children of the summer session of school without deduction; said summer school being taught by a separate teacher; counting it with the enrollment of the winter term without making any allowance for duplicate registration, which in some cases may have amounted to one-sixth of the entire enrollment. In the rapid-moving populations of cities and villages in the far West there is very much duplicate registration at the present time, and it happens often that the methods of excluding this error are far from efficient. The falling off in the proportion of the population enrolled is something less than seven one-hundredths of 1 per cent on the quota from year to year.

But the statistics of schools in other nations where a complete compulsory system is in efficient operation show that 20 per cent of the entire population enrolled in schools is too large to expect under normal conditions. And yet in Table III*b* it is shown that the per cent enrolled in 1889-90 amounted to 23.17 of the entire population, while in 1899-1900 it amounted to 22.50. The increase of population enrolled in secondary and higher schools proves conclusively that the amount of schooling for each person as a whole is increasing in the United States, and that the schools are reaching more persons from year to year. The system of higher education in 1890 enrolled only one five-hundredth of the population, while it enrolled nearly one three-hundredth in 1900 (i. e., it increased from 2,181 to 3,139 in the million). The increase in secondary education also was approximately from 1 in 200 to 1 in 100 (i. e., from 5,872 in the million of population to 9,449 in the million).

TABLE IIIa.—*Increase in eleven years of the total number of persons receiving education and the total population.*

School year.	Pupils, public and private, of all grades.	Increase over preceding year.	Per cent of increase.	Estimated population.	Increase over preceding year.	Per cent of increase.
1889-90	14,512,778			<i>a</i> 62,622,250		
1890-91	14,669,989	156,291	1.08	63,899,588	1,187,338	1.90
1891-92	14,714,933	45,864	.31	65,027,377	1,217,789	1.91
1892-93	15,083,630	368,697	2.51	66,266,491	1,233,114	1.91
1893-94	15,530,268	446,638	2.96	67,597,727	1,271,236	1.92
1894-95	15,688,622	158,354	1.02	68,844,341	1,306,614	1.93
1895-96	15,997,197	308,575	1.97	70,127,242	1,282,901	1.86
1896-97	16,255,663	257,866	1.61	71,445,279	1,318,031	1.88
1897-98	16,687,643	432,556	2.66	72,792,617	1,347,344	1.89
1898-99	16,738,362	50,719	.30	74,178,966	1,385,349	1.90
1899-1900	17,020,710	282,348	1.69	<i>a</i> 75,602,515	1,423,549	1.92
1900-1901 <i>b</i>	17,299,290	278,520	1.64	77,232,743	1,660,228	2.20
Total increase.....		2,786,452	19.29		14,640,493	23.38
Average.....		253,314	1.61		1,330,954	1.93

a United States census.*b* Indian Territory added.TABLE IIIb.—*Per cent of the population receiving education of different grades in 1889-90 and 1899-1900.*

Grade.	1889-90.		1899-1900.	
	Pupils.	Per cent of population.	Pupils.	Per cent of population.
Elementary:				
Public	12,494,233	19.95	14,821,969	19.60
Private	1,516,300	2.42	1,249,925	1.64
Secondary:				
Public	221,522	.35	530,425	.70
Private	145,481	.23	188,816	.25
Higher	135,242	.22	293,575	.31
Total	14,512,778	23.17	17,020,710	22.50

THE AVERAGE AMOUNT OF SCHOOLING PER INHABITANT.

It will be seen from Table IVa that the average schooling in years of 200 days each in public and private schools for the whole United States was 5.14. The different divisions of the United States, however, varied much, as will be seen by reference to the table. One also sees in what manner the total amount of schooling per individual has increased during the past thirty years.

In Table IVb the same items are given with reference to the public elementary and secondary schools, the private schools and higher institutions being left out of consideration. It will be seen that the common schools, including the elementary and high schools, give an average to the entire population of nearly six years in the North Atlantic Division.

I repeat here certain interesting estimates upon the amount of schooling given to each inhabitant on an average at different selected dates in the past century. While there were many sections of the country, in cities and wealthy towns, that extended the blessings of

education practically to the entire population early in the century, yet, on the whole, no State or Territory had any compulsory laws or attempted to provide in an effective way for the education of all the children of the people. A careful estimate of the entire amount of schooling obtained by the average person in 1800 shows that it did not exceed 82 days of school instruction during his life. The vast majority of the people within the limits of the United States did not receive any school instruction at that time. In 1840, the year in which the United States census began to enumerate the number of persons that had attended school the previous year, the total amount of schooling for each inhabitant had risen to 208 days; and according to the census of 1850 the average amount of schooling had increased to 420 days, for this decade was a period of agitation on the part of Horace Mann and his disciples. A great revival in common-school interest extending through the thickly populated sections of the country had produced this great change in the ten years, 1840-1850. In 1860 the average amount of schooling had risen to 434 days, only 14 days more than it had been in 1850. But in 1870 the number had reached 672 days; in 1880, 792 days; in 1890, 892 days, and in 1900, 1,026 days.

TABLE IV a.—Average number of years of schooling (of 200 days each) that each individual of the population received at the different dates specified in the table, taking into account all public and private schooling of whatever grade.

	1870.	1880.	1890.	1893.	1894.	1895.	1893.	1897.	1898.	1899.	^a 1900.	^a 1901.
The United States..	3.36	3.96	4.46	4.58	4.85	4.87	4.99	5.09	5.20	5.09	5.13	5.14
North Atlantic Division..	5.06	5.69	6.05	6.13	6.41	6.52	6.67	6.84	6.95	6.90	6.98	6.94
South Atlantic Division..	1.23	2.22	2.73	2.84	3.02	3.01	3.01	3.07	3.32	3.11	3.17	3.35
South Central Division..	1.12	1.86	2.42	2.70	3.00	2.81	2.87	3.03	3.04	3.09	3.11	2.97
North Central Division..	4.01	4.65	5.35	5.43	5.72	5.81	6.00	6.01	6.15	6.01	6.09	6.05
Western Division.....	3.56	4.17	4.57	5.17	5.29	5.62	5.63	5.90	5.85	5.42	5.53	5.61

^a Subject to correction.

TABLE IV b.—The same, taking into account only the schooling furnished by public elementary and secondary schools.

	1870.	1880.	1890.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	^a 1900.	^a 1901.
The United States..	2.91	3.45	3.85	4.05	4.23	4.35	4.43	4.53	4.63	4.55	4.59	4.53
North Atlantic Division..	4.43	4.84	4.99	5.12	5.34	5.51	5.64	5.78	5.88	5.85	5.91	5.87
South Atlantic Division..	.80	1.90	2.42	2.55	2.76	2.73	2.74	2.79	3.05	2.83	2.88	3.04
South Central Division..	.80	1.57	2.20	2.44	2.68	2.53	2.59	2.75	2.76	2.81	2.83	2.69
North Central Division..	3.71	4.19	4.67	4.88	5.14	5.26	5.15	5.40	5.51	5.41	5.48	5.48
Western Division.....	2.77	3.57	3.98	4.60	4.71	5.04	5.12	5.39	5.34	4.96	4.99	5.01

^a Subject to correction.

Education in central Europe.—Chapter I presents, among other items, a view of recent educational movements in Germany, and gives some idea of the conflict existing there between classical and modern tendencies in secondary schools. The most interesting point is per-

haps that found in the Emperor's order which assigns great importance to instruction in the English language. He says: "I desire * * * that English be introduced as an optional study of equal rank with Greek in classical schools throughout the Kingdom of Prussia. Where local needs suggest, English may replace French as a regular study and French be taught as an optional study." That this is the result of modern commercial and industrial conditions is plainly seen from the equanimity with which the people view this step. The *Journal des Débats* (Paris) says "that the Emperor morally gives to English that increased importance which naturally belongs to it." The *Gaulois* (Paris) is of like opinion when it says: "Friendly competition between England and Germany is the reason why the young men of the German middle classes, who are not intended to become gentlemen of leisure nor men of the world, but business men and industrialists, are advised by their Emperor to learn English rather than French." In order to further show the powerful influence modern industrialism has upon education in Germany, some extracts from an address of Prof. A. Riedler, of Berlin, on "The necessity of technological education" are given. Professor Riedler argues that the teaching of science for its own sake, as is done in the old established universities, will not suffice in the present age. Knowledge is valuable only when it can be applied in life. He urges that the polytechnica of Germany should direct their main attention to adaptations and applications. A creative agency, he says, is not an end in itself, but is a means toward definite economic purposes. Every engineer who wishes to be a creative agent must realize that he is a link in the chain of productive industry. All instruction, especially that in the higher seats of learning, must conform to this tendency. The time has passed when pure scientific education meets all demands. It is said that this professor, a very frank and outspoken advocate of the polytechnicum as against the classical university, succeeded in convincing the Emperor that by giving the polytechnica the right to grant degrees (Doctor of Engineering), the institutions would rise in the estimation of the people, and subsequent events have proved this opinion correct. Students from other lands visit the German polytechnical schools. There are now more than 2,000 foreign students among a total of 12,000. But this does not, as might be expected, diminish the number of foreigners in the old-established universities.

Art education in Germany.—W. von Seidlitz, in the *Deutsche Revue*, like other philosophic writers on æsthetics, uses the term art not in any restricted but in the widest sense, as embracing poetry, or rather good literature, painting, sculpture, the drama, and music; he includes even industrial art. He gives an account of the efforts of the Hamburg teachers to sift out what is undesirable in juvenile reading matter and to decorate the school houses and rooms. The numerous advocates of schoolroom decoration in the United States will read

with some interest what he says on this topic. One will be surprised at what he says against juvenile literature. He contends, namely, that a juvenile book of poetic form should be a masterpiece; but literary masterpieces, he says, belong to general literature, and hence a specific juvenile literature has no right to exist.

Commercial schools and commercial universities in Germany.—In a historical review of the gradual growth of commercial educational institutions, the fact is brought out that as early as 1715 a petition was presented to the Government of the Kingdom of Saxony to open a commercial academy, the plan of which resembled that of a university. The recent opening of a higher commercial institution affiliated with the Leipzig University, of a similar institution connected with the polytechnicum at Aix-la-Chapelle, and of independent commercial universities at Hamburg and Cologne are indications of the intense earnestness with which the Germans are preparing themselves for competition in the world's markets.

School supervision in Germany.—An account is given of the conditions of school supervision existing in the German Empire, and especially in Saxony. It sketches the legal provisions for the three grades—local, county, and State supervision—showing that neither local nor State supervision exerts much influence upon the schools, but that county supervision, being professional supervision, exerts a very beneficial influence. Comparing the number of school supervisors with that in American cities, it becomes at once apparent that German schools seem to get along and produce good results without much supervision, for rarely do the members of a local board visit the schools, the county supervisor or inspector scarcely more than once or twice a year, and the minister of education, as State supervisor, never. This is explained by the fact that no person can be employed as an elementary teacher in central Europe unless he have a certificate acquired in a State examination after four years' (in some German States six years') attendance at a normal school, and no one can be appointed to a position in a secondary school who is not a university graduate or has university and normal-school training combined. This naturally does away with the necessity of constantly directing the teachers in their daily work, and hence the small number of supervising officers.

Institutions for the defective in Germany.—A statistical review of institutions for the blind, the deaf, idiots or the intellectually weak, and the morally depraved is offered, which proves that the 26 States of the Empire are eager to save the unfortunates, to enable them to make a living, and to change them from social debits to social credits.

A new law concerning reformatory education of children in Prussia.—This law affords a characteristic example of German thrift and parental government, containing, as it does, provisions for placing depraved children, duly convicted, not in institutions where they

might be further contaminated with crime, but in well-reputed families, where they are kept as apprentices under strict supervision and seclusion from the evil influence of the streets. Such commitments, however, are made only by the proper judicial authorities, and the expense of such children is defrayed at first by the local government, but the government may reimburse itself by collecting the costs from the families from whom they are taken, except in cases of poverty. This law has now been in force a year and a half, and has proved so well devised and of such beneficial effect that other States of the Empire are beginning to copy it. The cause of this new departure in the treatment of juvenile criminals is the adoption of the imperial criminal code in 1871, which fixes the age limit of criminal responsibility at 12 or in some cases at 14 years of age. Children under 12 who commit crimes and neglected children over 12 and under 16 or 18 are now, through the operation of this law, not subject to punishment. Two years' margin (12 to 14) is the period allowed at the discretion of the judge, who in each individual case may decide whether the child is intellectually mature enough to realize the consequences of its evil acts, and the margin from 16 to 18 years is the period allowed at the same discretion in cases where the moral deficiency of the individual is in question.

Child labor outside of factories.—This gives the results of an official inquiry set afoot by the German imperial chancellor, Prince Hohenlohe. The purpose and nature of the inquiry is revealed in a circular letter, which sets forth that the census returns, which give a total of 54,375 wage-earning children, offer but inadequate information on child labor, since the enumerators register only those children who are laboring for wages after having left school, though not yet 14 years of age. The figures, it is said, apply only to the most important occupations of wage-earning children, and even then are far from being accurate statements, since the number of school children employed in partly remunerative labor was not ascertained by the census. The different State and local governments conducted the investigations from January till April, 1898. In a few States the police authorities acted as agents, but in by far the most States the teachers of elementary schools were instructed to ascertain the facts. The results of the inquiry are startling. There were reported to have been employed for wages outside of factories (where child labor is prohibited by law) 532,283 children of school age (6 to 14), or about 1 per cent of the population of the Empire. If one adds to that an equal number who are employed for wages in agricultural pursuits, there may be said to be about 1,000,000 school children employed in earning wages, or about 10 per cent of the school population. This is a very great number, and accounts for the many complaints of teachers who find school children listless, sleepy, fatigued, and generally incapacitated for vigorous mental action. The report goes into details as

to the kinds of occupation, the age of wage-earning children, the daily work hours, the arrangement of work rooms, the amount of pay, and the police regulations concerning child labor in Germany and other countries. The Berlin *Tägliche Rundschau* discusses the report and adds some instructive details. The official character of the inquiry secured for this report the attention of legislators in Germany, and measures are being prepared to counteract the dangers arising from excessive child labor, but it is generally understood in that country that a limited amount of responsibility may safely be laid upon children, in order to accustom them to regular habits and thrift, and to lay the foundation for an active, useful life. Hence it is not to be expected that all wage-earning child labor will be prohibited, but that excessive demands and overburdening will be checked.

Higher education of women in Austria.—This is a brief account of the efforts made in behalf of women in that Empire. They indicate a considerable degree of progress if viewed from the Austrian standpoint, for the educational efforts of any country should be viewed only in the light of its own development. It is apparent, however, that in Austria and other European countries the problem of how to make woman's intellectual talents an available resource in the social wealth of the nation is being solved.

Agricultural schools in Austria.—The account which was prepared for the late exposition in Paris by the chief of the educational section of the department of agriculture in Austria is of unusual interest, inasmuch as it shows not only what is done for agriculture and forestry in Austria, but how it is done. It will challenge comparison with the noteworthy operations carried on in recent years in our own Department of Agriculture. In view of the rigid centralization of the government of the Empire, it is worthy of notice how great an amount of liberty is granted in establishing educational facilities where necessity or special demands suggest them. Especially in regard to forestry Austria's example is worthy of imitation.

Noiré's logos theory.—In an extract from Noiré's book, "*Loges, Ursprung und Wesen der Begriffe*," is offered the classic passage in which the author elucidates the theory of apperception in so instructive a manner that it is worthy of a place even in an annual report like the present. Herbart has become the counterpart of Pestalozzi. While Pestalozzi has based all education on sense perception (*Anschauung*), Herbart has based all on the explanation or interpretation of what is perceived, and this he called apperception. Pestalozzi would say, fit your children to see for themselves the objects which they wish to learn; Herbart would say, have the children understand what they see, have them think out the relations of every new item of knowledge to the accumulated experiences regarding the object. It is easy to see that Herbart is more important than Pestalozzi as far as his theory of the faculties of the mind is concerned. Anyone who

wishes to get the clearest idea of this doctrine of apperception will study carefully Noiré's illustration on page 106, of the apperception that is involved in perceiving so simple an object as a piece of bread. The apperceiving mind in looking at the piece of bread thinks of the steps of its production, as, for instance, dough, flour, grain, and of the processes by which each of these have originated; also, of the uses of bread as food in restoring the waste of the organism and of the activities of life that are made possible by this food. Apperception reinforces the senses by adding all that is stored up in the mind as an aggregate of experience, and thus produces what we call an understanding of the object, or a comprehension of it. It is the insight into causality that explains what exists in the present by what has existed in the past, and it looks forward and predicts the future as results of causal activities that it sees now in operation. Schopenhauer wrote a book on the fourfold root of the principle of efficient causality. Noiré discusses the conclusions arrived at in that treatise and explains by it his views of apperception and the elements of causality which it involves. He who deals successfully with German pedagogy need not be told that it is necessary to master the German systems of philosophy. American students who bring home from Germany mere fragments or dead results of German systems, without their life-giving principles, usually end in producing what are called "fads." They try to adopt German methods in circumstances where they are in no wise appropriate. The life-giving principle of the German, if seized by an American, will prove a lasting source of inspiration and of profounder insight into practical problems. It is of course slow work to master a theorem in German philosophy, but no one who has done this will say that he has not been recompensed for his time.

Goethe and the great thinkers.—An address of Prof. Rudolf Eucken in Jena is translated for this report. There has hardly been another mind of such comprehensive grasp in modern times as Goethe's. Hence it is interesting and instructive to see how the great thinkers of all ages, especially of antiquity, have influenced the great German thinker.

State appropriations for education in Europe.—A brief statement from a German authority is given of what the Russian Empire, Switzerland, Prussia, and Italy expended in 1900-1901 for popular education, and also a discussion of the cost of professional preparation of teachers in certain of the German States.

The Ohio school system.—In Chapter II, Miss Mary L. Hinsdale has traced the evolution of the Ohio public school system, basing her work upon a study of the session laws of the State. Although the usual clause enjoining upon the legislature the perpetual encouragement of schools and the means of instruction was incorporated into the first constitution of Ohio (1802), yet for twenty years it seems that "the

State did absolutely nothing to carry out the provision," relying entirely upon private initiative. The gradual formation of a sentiment in favor of public schools is shown by the appearance upon the statute book, first, of a permissive law (1821), then of a mandatory one (1825). The latter measure, though crude, weak, and tentative, marked the true beginning of public education in Ohio. The further development of the system, the successive introduction of features then untried but now familiar, the mistakes made and rectified, the steps taken forward and backward as the progressive or conservative elements of the population alternately gained the upper hand, are typical of what occurred in many other States and form an instructive chapter in our educational history.

Consolidation of rural schools.—A compendium of information regarding the consolidation of rural schools, and the transportation of pupils at the public expense, is given in Chapter III. It contains a report by Superintendent O. J. Kern of a visit to the centralized schools of Ohio, in which are given many useful particulars of the practical workings of consolidation in that State; also detailed accounts, reprinted from the reports of the State superintendents of Massachusetts, Indiana, New Hampshire, and Nebraska, of the attempts that have been made in the direction of consolidation in those States, as ascertained by those superintendents in each case through a special inquiry made of the local officials who have had to put the system into actual operation. The statements by these local officials of the steps that were taken, the modes of procedure, the saving in cost, and the advantages and disadvantages resulting from consolidation in widely separated localities, and under a great diversity of social, climatic, and topographical conditions, furnish a considerable body of first-hand information on this subject. Upon the success of this movement rests the chief hope for the improvement of the rural school. It is fortunate that a device which changes the ungraded school into a graded school involves a saving of expense. The improvement is well worth trial, even were it to double the cost of the rural school, but as will be seen by the statistics given in this chapter it is secured with an actual saving of expenditure. Better teachers, more sanitary buildings, less personal exposure on the part of pupils, better classification, and many lesser advantages are commending this reform to county superintendents over the country. It was first tried in certain rural towns of Massachusetts, notably Quincy and Concord.

Industrial education (Chapter IV).—At a meeting of the Society for the Promotion of Engineering Education, held at New York July 2 and 3, 1900, a committee specially appointed for the purpose made a preliminary report upon "the educational means and methods which they are prepared to recommend as best adapted to advance the general cause of industrial education in this country." The committee

in their report consider in turn the various schools and other agencies designed to furnish the necessary training for those young people who, having had a common school education, desire to prepare themselves for employment in manufacturing industries, in commercial houses, or with the great transportation companies. The functions and office of each class of these schools are characterized by the committee, and an opinion is expressed as to the degree of usefulness of each, considering the particular end it has in view.

Chapter V contains an account of various efforts made in this country to apply self-government in education. This account refers chiefly to those attempts which direct their attention to the unfortunate, weak, neglected, or depraved children, and try to save these members of the social body for a life of usefulness. These efforts have a double purpose—first, to give proper treatment to children who are apt to sink under neglect into confirmed criminals, and second, to free the schools from a contingent that tends to retard the progress of normal pupils. Many noble men and women are devoting their energy to raising the lowly to a higher degree of usefulness, and their methods, though varying to suit the existing circumstances, are all successful. Among the most noteworthy of these efforts in the line of what has been called educational pathology the one which aims at the establishment of special children's courts in several of the large cities of this country—deserves particular mention. Lawyers of repute in New York and Chicago have taken interest in the establishment of children's courts, and much is said in praise of those which have been in operation in Massachusetts. Another method is the application of self-government in education, as is seen in settlements organized on the model of the "George Junior Republic," all of which are intended to aid in raising the social standard among youth and to prepare useful citizens for the State. Several years of experience have proved the desirability of such measures, but all prove indisputably that the vital force in such an experiment is, and needs must remain, the teacher. Where his sympathy and wise suggestions are lacking the attempts at managing a school by methods of local self-government will result in failure. While the efforts sketched in this chapter are mostly such as deal with the weaklings of society, there are advocates who propose to introduce self-government into schools of normally endowed and properly behaved children.

International Association for the Advancement of Science, Arts, and Education.—In Chapter VI an account is given of the International Association for the Advancement of Science, Arts, and Education, by Prof. Patrick Geddes, F. R. S. E., secretary of the British and American groups. Considerable space is devoted by Professor Geddes to an account of the origin of this association. The idea, as he shows, was several times broached in conferences of scientific societies, and in 1899 the occasion was offered for active measures in furtherance of

the project by the simultaneous meetings of the "British Association" at Dover and the "French Association" at Boulogne. The first international assembly of the association was held at Paris during the exposition of 1900. The purposes of the association and the method of its practical operations are set forth in a report of this assembly, which comprises the greater part of the chapter. "The first task of the association and its assembly," says Professor Geddes, "was to cooperate with the various international congresses to be held during the exposition, and wherever necessary or desirable to aid the existing agencies in recruiting suitable members for these. To the many specialists of all kinds who attended the exposition without being able to be present at the exact time of the particular congress most interesting to them, the congress information bureau of the association and the special rendezvous which it arranged proved of great service. Thus each member of the association on reaching Paris was enabled rapidly to avail himself of its resources and to meet his fellow-workers, French and foreign alike. The international assembly was included in the official list of congresses as the permanent *École Internationale de l'Exposition*. Besides keeping record of the congresses in the usual way, it was attempted, in some measure, to indicate their main problems and to summarize their main results by a full use of graphic methods."

The assembly also furnished interpretation and skilled guidance to all the departments of the exposition, programmes of lectures and of visits to the collections having been carefully prepared beforehand. The special literature of the exposition was carefully collected and classified by the assembly and a beginning was made in respect to securing typical exhibits for circulation. Thus a duplicate of the admirable nature-study exhibit of the Philadelphia Normal College, supplied by the kindness of Professor Wilson and her pupils, was circulated among Scottish and English schools for some months, and the "tenement house exhibition organized in New York and exhibited in Chicago and Boston" was secured for exhibition in Great Britain, where the question of the housing of the poor is urgent.

As a result of the Paris assembly several standing committees were formed, of which the most important was a committee on museums. This committee purposes in particular to work for the coordination and perfection of museum plans in different countries and cities, and to conserve so far as possible certain parts of international or world expositions which have a permanent educative value. In general the aim of the International Association for Science, as unfolded by Professor Geddes, is to correlate the work of individual organizations of various but kindred characters. The association is still in a tentative stage, but the experience at Paris helped materially toward defining its scope and methods.

In summing up the work of the Paris assembly, M. Bourgeois

reports that 800 lectures were given in 120 days, being an average of 6 lectures daily. The auditors ordinarily ranged in number between 40 and 50, but sometimes reached over 300. The total number of professors who took part in these lectures was 100, and 8 secretaries were employed.

Professor Geddes has included in his paper an account of the preliminary arrangements made for the second assembly of the association, which was held in connection with the Glasgow Exposition of 1901.

Training for railroad service.—Chapter VII, on educational training for railroad service, gives an account of those technological schools in this country which recognize this branch of activity in their courses of study. My Annual Report of 1898-99 contained an article on this subject, and this chapter may be regarded as a supplement to it. Courses of study in civil and railway engineering are given with much detail. The question of specific preparation for railroad service is frequently discussed by railroad men, and it is often urged that much waste of time and energy could be avoided by such a preparation. In calling attention to the very great extent of the railroad interests as a factor of the present industrial life in this country, the necessity of special preparation for railroad engineering is brought out in a forcible manner.

Biological contributions to educational theory.—I have printed in Chapter VIII an abstract of an interesting article in the Pedagogical Seminary (edited and published by Dr. G. Stanley Hall, president of Clark University in Worcester, Mass.) relating to the development of the nerves and motor systems in children, the title of the article being "From fundamental to accessory in the development of the nervous system and of movements" (by Frederick Burk, October, 1898). An attempt is made to fix the relation in the order of development of the different structures of the nervous system. These are divided into fundamental and accessory by Dr. Ross, and by later writers on the same subject. The fundamental system includes such portions of the nervous system as man possesses in common with lower animals and which are well developed in the human embryo at birth. The accessory part of the nervous system includes those portions that differentiate the nervous system of man from that of the highest animals and which are absent in the human embryo. The accessory movements are those which man has acquired since he adopted the erect posture—that is to say, most of the movements of the hand in the grasping and holding of objects, and in using tools of various kinds. All his movements of the organs of articulation concerned in speech and most of the movements of facial expression are accessory. That the fundamental structures develop before the accessory would seem to be a matter of course, inasmuch as these terms are adopted to express this very fact. The main point to be ascertained for the bene-

fit of educational theory is, at what period of life the latter begin to develop and how long their period of development lasts. This period of development is called, technically, the "nascent period." During the nascent period the muscle or nerve system may be educated. Fundamental muscles correspond to fundamental nerves; accessory muscles to accessory nerves. The observations on the development of those parts of the brain and nervous system which relate to the fundamental nervous system can not in the nature of things furnish original data for the determining this question as to time of development. For it is only by comparing brain development, ascertained by post-mortem dissection, with the external development of power in the use of the two different kinds of muscles that the conjecture is reached that there are certain portions of the brain which furnish motive power to one set of muscles and certain other portions which furnish power to another set of muscles. One could never tell in advance, for instance, that the existence of brain matter at certain centers near the so-called fissure of Rolando would imply that the individual possessed the power of performing deft processes with his fingers, unless a great mass of observations had shown that the one invariably accompanied the other. The record of the actual possession of the different kinds of manual dexterity could be made only by a study on the living individual, the record of the differences in development of portions of the brain would naturally have to be made after death. Obviously the education of the individual can not be directed by a knowledge of brain development ascertained only after his death. Nor, on the other hand, can a body of knowledge relating to post-mortem dissection determine in advance the education of the individual case. For the diagnosis of the condition of the individual, and it is the same with the multitude, must proceed by observation of the external manifestations of power, the actual use, for instance, of the fingers of the hand or of the muscles of the vocal organs. The external observations must be organized into a consistent whole before they can be used to interpret the observations on brain development. Hence education would be bound to draw its conclusions from direct observations of external manifestation of power, and not from the more remote and less certain indications of brain development ascertainable in comparatively rare cases, and only after death.

It would not settle the question of the introduction of the art of writing into the work of the primary school to inquire whether those parts of the brain which have to deal with the coordination of the writing muscles are yet developed at the age of 7, 8, or 9 years. But it, educational theory, would appeal to the more primary scientific data which concern the fact of the actual capacity of the child at those ages to learn to write, and it would study the actual effects or influence of such training on the subsequent development of the child. It would notice whether evil effects followed, and by such inquiries

determine the best time when a special training should begin, all things considered. It would be taken for granted if the child could learn to write at 7 years, that his brain development must be already advanced sufficiently. Nor can the supposed anthropological origin—the origin of man in the lower animals—be of any value here for the determining of questions of education. Mr. Burk says, it is true, “The child traverses before he is 6 or 7 years old, not only the long, deep worn road of racial ancestry, reaching back perhaps as far as arboreal, or even aquatic life, but I think we may say he takes a few paces in certain few coordinations that are his own, blazes a few trees and leaves his mark.” If the inferences from the anatomy of the brain as a result of post-mortem dissection are far less reliable than inferences based on the direct data of observation and of experiments made with the living child in the special functions which are in question, it must be admitted that those inferences that are based on a possible or conjectured heredity in lower animal life are in the nature of idle speculations. Whether man’s ancestry was arboreal or aquatic or vermiform, or even some phase of plant life, does not contain even a hint as to the epochs of his present life. Only a study of present conditions and a comparison of these with the conditions of life in lower animals can establish such a relation if any exists, and the data of this class of direct observations contain the only bases on which valid inferences for education may rest. To find these bases in conjectured anthropological principles, giving them an air of scientific demonstration, is an unwarranted procedure, for the anthropological principles in this case are unscientific conjectures. No one has shown what the line of descent (or ascent) of man was, or whether it is the same for all men, still less has any one adduced scientific proof of the correspondence of any of the ages of man’s life to the life of his ancestry. It would be unwarranted, therefore, to make out a course of study for the schools on any conjectures relative to these things. Even were the conjectures to be established as scientifically probable, it would remain to be determined whether the “road of racial ancestry” should be taken positively or negatively in human education; whether it should cause education to eliminate all traits and life habits of such racial ancestry, or whether education should encourage the human being to endeavor to repeat them in his own life.

Ethics and human conventions determine this matter in all nations, and education follows their behests as an actual fact. However lacking in valid basis such conclusions as those of Mr. Burk are in regard to the age of teaching accuracy in hand and finger movements such as are involved in writing or in the kindergarten occupations, yet the question is an important one to be considered by the director of schools. Mr. Burk infers that the ninth or tenth year should be reached before the school should make efforts “to compel accuracy,”

but, as we have seen, an inference that is based on anatomical investigation is of no value unless it rests likewise on a previous investigation of the external manifestations of power. In the present case the inference from nerve development must presuppose a body of knowledge obtained from investigation of the child's efforts to learn to write or to manipulate the kindergarten gifts. The efforts of the child to obtain skill in these matters are, as an actual fact, crowned with some success at three years of age, more success at four years and subsequently. The child's effort develops the brain, presumably. The child, as a fact, does not, if left alone till ten years, learn to write with more elegance. The actual facts are ignored or slighted by reason of the anatomical delusion that an inspection of the brain settles in advance this question of the time to begin to teach writing. The child, as shown by Preyer, puts himself to school in learning manipulation from the time when he begins to grasp objects in the seventeenth week. Before the age of six years he has arrived at the time when he may begin by easy lessons to learn the use of the pen and pencil. How fast he is to learn, and how much time he is to give per day, how long he should write at a time, these are important matters, to be ascertained by wise attention to fatigue and to the bodily reaction which manifests itself on occasion of the occupation of special muscles by the will, and by carefully noting that the elasticity is preserved, these being matters of practical investigation in the school room and the home rather than in the anatomical laboratory.

Biological theory of inhibition.—In Chapter IX the word "inhibition" is not used in its ordinary sense as a restraining act on the part of the conscious will, but rather as the equivalent of the Herbartian expression "Hemmung," which may be otherwise translated arrest, or suppression, referring to the suppression or submerging of an idea that has already come into consciousness by an idea exciting greater immediate interest. One idea thus eclipses or obscures another idea, and this eclipsing or obscuring is called "inhibition" in this chapter (which is an abstract of an interesting article by Mr. H. S. Curtis, in the Pedagogical Seminary for October, 1898). Inhibition as an act of conscious will is perhaps one of the most important factors in the self-education of mind. Everything that is ethical, everything that is rational, is accompanied by inhibition. And the most plausible suggestion that has been made in physiological psychology is that the function of the gray matter of the brain, the so-called cortex, is wholly devoted to inhibiting and coordinating the impulses that arise in the lower centers of sensation and motion. If this conjecture has a basis in fact it furnishes a very luminous explanation of the relation of the mind to the brain; it makes the will the prime mover in building the body and in using the body as its instrument; it makes the brain the instrument of the soul. But Herbart has no place in his system for the will as the governing principle, for he substitutes

desire for will in his theory. There is no individual sovereignty, but only a conflict between ideas within the mind and ideas that are seeking to enter the mind. The result of the struggle is the triumph of the stronger concept, according to his method of looking at mental operations. The ordinary view is that the will is supreme whether it permits a struggle between fancies that arise, or whether it suppresses them altogether by an inhibitive act. Attention is to be called to that part of this article which relates to fatigue and the encroachment of one set of activities upon another, and to the robbery of the muscles by the waste of brain tissue through worry or close intellectual application; and likewise the robbery of the digestive organs through the same causes; the effects of the deprivation of sleep. The author says well, "Just as the heart and brain will starve the rest of the body and still be undiminished themselves, so it seems to be nature's law that active parts shall be fed at the expense of inactive ones, if necessary, or even at the expense of parts active in a lower degree." Professor Sargent, of Harvard, is quoted as saying, "porters, draymen, heavy iron workers, and a certain class of athletes often illustrate the effects of an excessive use of the muscular system. Where the body's nutriment is expended in this direction the impairment of the heart and lung tissue is likely to follow." The action of the will produces fatigue in the bodily organs, whether the same be muscle or brain, and the exertion of the will in persons of nervous temperament is prone to rob the vital organs, such as the stomach or the heart, of the nervous energy required for their normal action. This deserves the most careful consideration on the part of the directors of physical training in our schools and colleges.

History of public education in the South.—In Chapter X, Rev. A. D. Mayo has given an historical account of the movements that were made toward the establishment of common-school systems, previous to the civil war, in the States of Louisiana, Missouri, Arkansas, Texas. In Missouri such a system had been put into fairly successful operation by 1860. In the other States of the group some sort of beginning had been made.

In Chapter XI the same writer treats of education in the South—principally of the freedmen—during the civil war and the period of reconstruction. The first considerable attempt to provide schools for the refugee slaves was made in the city of Washington, whither these unfortunate people had fled in large numbers at the outbreak of the war. The same work was entered upon in southeast Virginia at an early period of the conflict. The educational labors of Gen. Rufus Saxton among the freedmen of the Department of the South, of Gen. John Eaton among those of the Mississippi Valley, and of Gen. N. P. Banks in Louisiana, are narrated at considerable length by Dr. Mayo. An account is also given of the Freedmen's Bureau, the Peabody Education Fund, the mission schools established by

funds from the North, and the Hampton Normal and Agricultural Institute.

An historical document.—In August, 1864, during the civil war, Prof. Edward S. Joynes, of William and Mary College, Virginia, addressed a letter to the trustees and faculty of Hollins Institute at Botetourt Springs in the same State, where he was temporarily employed, in which he made an elaborate argument in behalf of a plan which he had devised for the normal instruction of women at that institute, in order to provide a corps of trained teachers for the schools of Virginia. His discussion of the subject forms an instructive chapter in the history of normal schools. The many side-lights which this letter throws upon educational and social affairs in Virginia at this period render it of peculiar interest and value, and I have included it in the present Report (Chapter XII).

Industrial education in the South.—A number of addresses delivered at the tenth annual meeting of the Southern Educational Association, held at Richmond in December, 1900, are printed here (Chapter XIII). In one, President George T. Winston, of the North Carolina College of Agriculture, emphasizes the need of industrial education for the development of the new South; he urges that the whole scheme of negro education, from elementary to higher, should be industrial. President Charles W. Dabney, of the University of Tennessee, also lays stress on the necessity of industrial and technical education, but maintains that a more thorough public-school education must precede and form the foundation; he shows by statistics that the education of the masses of a people increases their wealth-producing power, and that this power in any people may be measured by the school privileges that they have enjoyed. A discussion of the social phases of negro education by Dr. Paul B. Barringer, chairman of the faculty of the University of Virginia; by President Julius D. Dreher, of Roanoke College, and by Principal H. B. Frissell, of Hampton Institute, follows.

German instruction in American schools (Chapter XIV) is an especially interesting contribution as throwing light on the function of the American public school in rendering homogeneous the composite elements of the population. It has been prepared by Prof. L. Viereck, formerly a member of the German Reichstag, who came to this country for the express purpose of studying the extent of German influence upon American civilization.

All school education at public expense demands for its justification the existence of some political necessity which it provides for, or the existence of a general want in society for the supply of which the system of education serves a useful purpose. Thus our common schools are generally supposed to provide voters who can not only read the ballots which they cast, but also read the political discussions in the newspapers and form an intelligent opinion on the polit-

ical issues which their ballots shall decide. Without such ability to read on the part of its citizens the right of suffrage is a mockery. The citizen is supposed not only to cast an intelligent vote for the election of his lawmakers, but also to be able to read the laws made to govern him. The ancient and necessary ceremony of publishing laws by the mouth of the herald, who read them in public places to the people, is abolished, and yet people are held responsible for a knowledge of all laws enacted, it being assumed that every person can and will read the laws. There is a still further assumption that ordinary citizens shall be able to serve their turn as legislators, and make laws, as well as elect others to make them.

Unless the State does injustice to the poor class it will give all its children a chance to learn how to make laws as well as how to obey them. No class of citizens can claim as a right to have any other language than the language of the government taught in the schools at public expense, yet the fact that they have a right to retain the use of a foreign language and to educate their children in private schools to use that language alone, and the further fact that a class of citizens do in fact exercise this right, may make it expedient and desirable that such language be taught in the schools at public expense, provided that by this means great social and political advantages result to the community as a whole; the community has the right to teach any modern language in its schools if it finds it expedient to do so.

The expediency of introducing German-English instruction into public schools is the question to be decided, and not the question of the legal right to do so, nor the question of the right of a class to demand it. It is generally recognized by the people of the United States that immigration into our territory is a good and desirable thing. Inducements have been and are held out to foreigners to settle in America. The territory at first a wilderness becomes a populous and civilized State through the agency of foreign immigration. The conversion of natural possibilities into actual wealth is accelerated. The immigrant is bettered in circumstances by coming here, and still more is the native citizen benefited by the creation of wealth where there was no wealth before, for the native acquires wealth through the rise in the price of land and its sale to the immigrant, and secondly, through the profits of traffic with him, and thirdly, through a share in the increased production which the immigrant contributes.

But this direct benefit may be counterbalanced to a greater or less degree by the fact that the immigrant is a citizen not only with social rights, but also with civil and political rights. He can choose lawmakers for the natives; more than this, he can be elected to make the laws. If he has not absorbed the spirit of our institutions and

come into sympathy with it, if he has not learned how to perpetuate our institutions as a lawgiver, he will foist upon us parts of foreign laws and institutions. If he is ignorant even of the institutions of his native country, he will be a still worse element in our politics and will seek narrow, selfish advantages under the banner of the demagogue whom he will aid to corrupt our politics and rob our public treasury.

It is all important, therefore, that the immigrant shall be educated in our best institutions and "Americanized" in the spirit of our free intelligence. Otherwise he certainly will be "Americanized" by the worst forms of our political corruption. This is not a matter of choice between two different courses of action. If we do not "Americanize" our immigrants by luring them to participate in our best civilization and to adopt an enlightened social intercourse with us, they will contribute to the degeneration of our political body, and thus de-Americanize and destroy our national life. If we allow them to grow up in ignorance, they will lower the standard of political honor and intelligence. If they establish schools of their own and even achieve a high culture in them, as Germans have done when they have refused to enter our public schools, still they may lack training in the spirit of our special forms of government, and being educated into foreign ways of viewing and acting, they are all the more incapable of rightly judging public exigencies, of understanding the motives of, and sympathizing with, the native population.

The more highly cultured and civilized the immigrants that come to our country, the more stubbornly will they hold to their own manners and customs. Hence the very qualities which should make them desirable from the economical point of view may make them dangerous politically. Under all circumstances it is desirable that the immigrant shall be educated in the same schools with the native population if he is to have and exercise political power. Acting upon this principle, most of our cities east and west having large proportions of German population, have adopted at one time or another the study of German into their public schools. The immediate effects justified expectations. Large numbers formerly taught by foreign teachers and in private schools came into public schools, and while learning some German have learned much English, to their great future benefit and to the great benefit of the native population. Every year has witnessed the breaking down of barriers of caste in those cities.

The public school is the instrumentality designed to preserve democratic principles. It protects one class against another by giving an opportunity to the children of all classes for free competition in the struggle to become intelligent and virtuous. An aristocracy built on the accident of birth, wealth, or position, can not resist the counter-influence of a system of free schools wherein all are given the same

chances. To eradicate caste distinctions in the community is the most important function of the public school. Homogeneity of population is the great desideratum for free institutions, but it should be homogeneity on the basis of educated intelligence, and not of illiteracy.

No public institution is established on a firm foundation so long as it is beneficial only to a small class of the community. The introduction of German into the schools makes them useful to a greater number, and hence more stable. The thorough mingling of the populations has produced a very rapid assimilation. The German children in the public schools are as thoroughly American in sympathies, views, and aspirations as the Anglo-Americans. The influence of the schools largely reacts upon the parents through the children, and where formerly German was spoken altogether by parents and children within the family, now both speak English to gratify the strong preference of the children.

For a long time after immigration the immigrants keep a relation with their kindred in the mother country. Our population in the Northwestern States keeps up correspondence and recognizes the family ties that exist with the people in Great Britain and Ireland, Germany, and the Atlantic States. No difficulty is experienced by the Anglo-American settler among us in this matter. But the German-American is obliged to learn two languages. For if his children learn English only there must be a too sudden and abrupt breaking off of the continuity of race, and a consequent great evil wrought upon the character. The consciousness of the history of one's ancestry, and the influences derived from communication with the oldest members of one's family, are very potent in giving tone to the individuality of youth and ripening age. This continuity of history is a kind of solid, substantial ground for the individual, and from its soil spring up his self-respect and aspiration. A class of immigrants who had no desire to preserve a relation with their family stock would bring calamity upon the community into which they came.

Child study.—In Chapter XV, I print a translation from the German giving an account of the first extensive attempts at child study, which were made in Berlin in 1869. The object of the effort in Berlin was to ascertain the contents of children's minds at the age of 6, when entering school. The teachers of that city had been induced by the study of psychology to make the inquiry very thorough. Circular letters were sent out instructing the teachers to ascertain how many of the young children entering school possessed some knowledge of the familiar objects named in a long list. The answers to 75 questions can not be obtained in a few minutes, and hence the examination was prolonged for weeks and months, thereby, as one would suppose, causing the influence of school to become an important factor in the equation. However, such as it is, it is of great value owing to its influence on subsequent inquiries made in this country. The teachers

in Berlin were desirous to find whether children coming from kindergartens were better prepared for school work than those coming from home; and again, whether children from infant asylums (*crèches*) showed less information than those coming from kindergartens. It must be noted that the date of the report is 1869, when kindergartens were still in their infancy in Germany. The tabulated results seem to show that kindergarten children have a greater wealth of ideas, both regarding facts in their immediate environment and regarding ideas involving some action of the imagination.

The education of the negro.—I print in Chapter XVI the results of an investigation of the present condition of negro education, especially as affected by the geographical distribution of negroes, by their moral, social, and economic status, by race prejudice, and other influences. The author (Prof. Kelly Miller, of Howard University) has made free use of any published statistics that would throw light upon the subject of his inquiry, and has been at some pains to interpret their results. Apart from a current of migration of negroes to cities, where the women find employment as domestic servants and the men as day laborers, the main tendency of the race is to mass itself in the fertile plains and river bottoms of the extreme Southern States, forming the so-called "black belt." The reasons for this segregation of the black population are fully considered in this article. Its effects upon the border States may be shown in some degree by the circumstance that throughout those States the race increased only 26 per cent in the thirty years preceding 1890, while as a whole the negro population of the country increased about 70 per cent in the same period. In Kentucky the negro element declined in thirty years from 20 to 14 per cent of the total population, and in Missouri from 10 to less than 6 per cent. On the other hand, there were, in 1870, 79 counties, mostly in the Gulf States and South Carolina, in which the negroes exceeded the whites by a ratio of nearly 3 to 1, the average being 276 negroes to 100 whites; while in 1890 there were 103 such counties, and in them an average of 319 negroes to 100 whites, or more than 3 to 1. This increasing concentration of the negro population in certain localities tends to intensify in a two-fold way the difficulties connected with the education of these people. In the border States, where the negro element is in many sections disappearing and where separate schools for the races are rigidly prescribed, the sparseness of the colored population forms an obstacle to an efficient school system; in fact, there are not enough colored pupils in some of the counties to supply children for a single school, and consequently a school organization of the ordinary form is impracticable. At the other extreme, those communities in which the colored people largely predominate suffer from a lack of means. Of even more interest to the general race question is the study made of the occupations of negroes and of the amount of property they

have acquired, including their status as owners and tenants of farms and homes. One-sixth of the negro families owned their own homes in 1890. There were nearly 30,000 negro owners in Virginia alone, though the absolute value of holdings was not large. Of the negroes employed in gainful occupations, 57 per cent were engaged in agriculture and 31 per cent in personal service, leaving only a little more than 10 per cent for all other occupations.

A separate section is devoted to the higher education of the negro, in which are considered the intellectual capacity of the negro, his need of the higher education, the relative claims of industrial and higher education, the higher education of colored women, negro colleges, the negro in Northern colleges, colored men in the professions, and negroes who have achieved distinction along lines demanding intellectual ability.

Early English writers on education (Chapter XVII).—It is important to the historian of education to read the notices of some early English writers on education, with descriptions, extracts, and notes, prepared for this report by Prof. Foster Watson of University College, Wales. The writers taken up are La Tour Landry, Juliana Bernes, Erasmus, Sir Thomas Elyot, and John Baret, and the extracts from their works afford considerable insight into the educational ideals and methods of the fifteenth and sixteenth centuries.

The Association of Catholic Colleges.—In Chapter XVIII are reprinted a number of papers and discussions from the proceedings of the third annual conference of the Association of Catholic Colleges, held in Chicago, April 10-13, 1901.

Right Rev. Mgr. Conaty, rector of the Catholic University of America at Washington, D. C., and president of the association, in his opening address on "The Catholic College of the twentieth century," enlarges upon the need of unification and coordination in the Catholic system of schools and higher institutions; in particular, he is of the opinion that the colleges should not undertake graduate work, but should encourage that class of students who seek advanced education along graduate lines to resort to the University at Washington, where the best facilities are offered for this kind of instruction. Rev. James A. Burns, in a paper on Catholic secondary schools, states that this class of schools is the weakest point in the Catholic educational system; according to his statistics and classification of pupils, Catholic secondary schools for boys have only one-third of the pupils they should have, or 13 to each 10,000 of the Catholic population; whereas in all secondary schools for boys in the country combined there are 39 pupils to each 10,000 of the total population. He concludes that efforts for the improvement of Catholic education can be best applied in building up a system of secondary schools, as nearly as may be parallel to the public high school system. The papers read at the conference on the teaching of science, history, English, and Greek,

respectively, form together a contribution to the literature of pedagogics of peculiar interest, considering, as they do, from the Catholic point of view, the aims, subjects, and methods of instruction in these branches.

Education in Great Britain and Ireland.—Chapter XIX treats of education in Great Britain and Ireland, with special reference to the organized systems of elementary education. The record of current events is brought into proper historical continuity by brief conspectuses of the different systems in the three great divisions of the United Kingdom. The elementary system of England, based on the law of 1870, and that of Scotland (law of 1872), are substantially alike in respect to the application of the Government grant for schools and the mode of Government inspection. Scotland, however, has been saved from the complications that beset the English system by the continuance of principles which had struck deep root in the country under the Scotch parish-school system, dating from a law of 1696. This system prepared the way for universal public schools under elected local boards, and thus avoided the friction of a dual system of public and parochial schools like that existing in England. The statistics show that of the 5,705,675 pupils enrolled in the elementary schools of England in 1900, a little more than half (53.3 per cent) were in "voluntary," chiefly parochial, schools, and 46.7 per cent in board schools under municipal control. The central Government bears the greater part of the expenditure for both classes of schools, viz, for the parochial schools, 78 per cent; for the board schools, 53 per cent. The balance of expense for the parochial schools, which are under private (chiefly clerical) management, is met by endowments, subscriptions, and fees. The board schools, that is schools under public control, claim the balance of their support from the local taxes ("rates"). From these unequal policies, financial and administrative, have grown unfortunate differences in resources and in purposes. In the thirty years since the passage of the Forster law of 1870 the increase of school provision and school attendance in England has been noteworthy. At that date it was estimated that the school provision was adequate for $8\frac{1}{2}$ per cent of the population, and that the number of pupils enrolled was equal to 7.6 per cent of the population; in 1900 the school provision was sufficient for $20\frac{1}{2}$ per cent of the population and the number of enrolled pupils equalled 17.7 per cent of the population (retrospective Table XVII). Both classes of schools, denominational and board, have contributed to this result, but the multiplication of board schools is the most impressive fact in the record. Three years after the passage of the school law board schools enrolled about 5 per cent of the elementary pupils; this proportion now reaches 47 per cent (Table IV). The accommodation in board schools, sufficient for 2,788,129 children, has occasioned an outlay of about \$209,000,000, or an estimated cost per child of £14 18s. 7d. (\$73).

This sum has been advanced by loans to the school boards and is secured by local taxes. During the same period of thirty years the denominational schools have raised by subscription for building purposes above \$55,000,000 (Table IX). Board schools have made their chief progress in the cities (as is shown in detail in Table II), comprising London and 65 county boroughs. In these communities the enrollment in board schools is 60 per cent of all pupils, as against 37½ per cent for the remainder of the country outside of these boroughs. In the more populous centers the board schools have developed great power of adaptation to the varying needs of children of different ages and conditions in life. This is shown by the successful conduct of infant departments, of special schools for the blind, the deaf mute, and the feeble-minded, and by the remedial influences brought to bear upon neglected and even vicious children. This adaptability of the board school is illustrated by detailed accounts of the work in London and five other typical cities (Table III and context).

These efforts in behalf of special classes of children are not more important than the progress in respect to the general conditions of school efficiency. The improvement in the teaching force of England is indicated by the steady increase in the proportion of adult as compared with pupil teachers, the increase being for all schools from 48 per cent of the total force in 1870 to 84 per cent in 1900. The board schools have had the larger share in this increase, and they have also been most favored in respect to efforts for raising the standard and prolonging the period of instruction. The rural parishes have in general only parochial schools. Even if there be a school board in a rural parish its jurisdiction is so restricted and the property assessment so low that the local tax yields but little for school expenditure, so that in any case the rural school has a poor outlook. The current income of parochial schools is estimated to be 10s. 6d. (\$2.50) less than the income of board schools for the children per capita. This difference, as is shown in the address quoted from Dr. MacNamara, M. P., falls most heavily upon the rural districts. It is reflected in the comparatively poor teaching staff of rural schools, and is emphasized by unsuitable school buildings and generally meager appurtenances. The city school boards have also been able to command liberal support from local taxes for advanced classes, and have in many instances developed what are known as higher grade schools (see Table III). The upper classes of these schools are on a par with the scientific departments of our own high schools, but the English higher grade school comprises also lower grades, to which children who are likely to continue in school up to the age of 15 or 16 years are admitted at about 10 years of age. Thus in 1900 the 44 higher grade schools of London enrolled 23,968 pupils 10 years of age and upwards, of whom 910 were above 15 years of age. The higher grade schools

act as a stimulus. Although access to them is not limited to board-school pupils, nor are they in every case created by the school boards, nevertheless it is to what may be called the sphere of school-board influence that the higher grade schools pertain. Thus it appears that the combination of public and parochial schools recognized by the English school law has really operated to bring about an urban school system of peculiar efficiency and promise and a rural system hopelessly hampered.

The problem of equalizing the school provision of England is involved with another problem apparently not less urgent, namely, that of an adequate supply of secondary schools accessible to the artisan and working classes. This need was recognized as far back as 1868 by the British schools inquiry commission and has been reiterated by subsequent commissions. Meanwhile the stress of business and commercial conditions has intensified the need. The upper grade board schools have indeed risen in response to this need, but they have come into conflict and sometimes into wasteful competition with the county councils and with other authorities in control of technical or of secondary education. The Government, which formerly favored the school board efforts in respect to higher grade schools, has recently shown the disposition to restrict their activity to a very limited range of elementary instruction. This action is in striking contrast to the policy in Scotland. The Scotch law of 1872 expressly authorized school boards to maintain secondary schools, and subsequent laws allowed them to levy local taxes for the support of such schools; but in Scotland, as already stated, school boards are universal, so that the unity of the system operates in favor of both elementary and secondary education.

The prolonged and bitter conflict which resulted in the defeat of the Government education bills of 1896 and 1901, and the controversy over the pending measure, are made intelligible by the discussion of these two items—rural education and secondary education. This last measure aims at a radical change in the local administration of schools and includes in its provisions both elementary and secondary education. While the proposals threaten the school boards with extinction, they seem, at least to the American student of the facts, designed to strengthen the parochial schools. The comparative Table XVIII, showing the progress under the Scotch law of 1872, illustrates the advantages of universal public schools. The school accommodation in this division of the kingdom, which even under the traditional influences of the parish system was only adequate for 8 per cent of the population in 1872, is now sufficient for 20 per cent (Table XVIII).

The statistics relating to higher education (Table XIX) show for the decade 1889 to 1900, considerable increase in the attendance at the universities and university colleges of England, but a decline in those of both Scotland and Ireland. The most decided step forward in Eng-

land is found in the university colleges, whose rise in the great centers of industry—Manchester, Leeds, Birmingham, and elsewhere—is an important event in the recent history of higher education in Great Britain. The decline of university students in Scotland is attributed chiefly to the lack of adequate equipments for meeting modern demands, especially in respect to science instruction and research. It is confidently expected that the Carnegie trust will do something to supply the necessary equipments in these respects, as one-half the income is to be devoted to “improvement and expansion,” in the widest sense, “in the faculties of science and medicine,” and in the “modern part of the arts faculty.” By the terms of this gift, which are given in Chapter XXIII of this Report, the other half of the annual income is to be spent in the payment of the fees of students of Scottish birth and extraction, according to the terms laid down in the deed of foundation of the Carnegie trust and the regulations of the trustees. The amount of the trust fund is £2,000,000 and the estimated annual income \$500,000. The first report of the administration of the trust shows that for the winter session 1901–2 the sum of £22,941 16s. 6d. was paid by it up to December 31, 1901, in behalf of 2,441 students, representing the fees of 7,610 classes. This comes to a little over £9 (\$45) per capita. The circumstances that caused the appointment of a Government commission to report on the state of university affairs in Ireland are set forth in Chapter XIX in a paper by Judge William O'Connor Morris, republished from the *Fortnightly Review*. The paper reviews incidentally and briefly the history of university education in Ireland, and discusses the present situation dispassionately from the Catholic standpoint.

Temperance instruction.—Various papers relating to temperance instruction in the public schools have been brought together in Chapter XXI, showing the trend of opinion on this subject. A report of a special committee of the department of superintendence of the National Educational Association sums up tersely the functions of teachers and superintendents in regard to temperance instruction, and points out the questions of importance for them to consider. A paper by W. B. Ferguson, superintendent of the schools of Middletown, Conn., treats of temperance teaching in Connecticut, and of the new and less radical law which has been recently enacted by the legislature of that State; the law as modified does not require temperance instruction below the fourth grade nor in the high school; the use of text-books is not required below the sixth grade, nor must any definite space in any grade of books be devoted to narcotics. Among the other topics discussed in this chapter, the conclusions and recommendations which appear in a report of a committee of the New York State Science Teachers' Association are worthy of notice, as a further indication of some reaction against the extreme views which have hitherto prevailed.

The State of Georgia has recently adopted the law requiring temperance instruction in its public schools. This legislation has completed the list of States requiring, by statute, text-book instruction on the effects of intemperance.

All persons with a knowledge of the situation will admit that it is very difficult to teach temperance in schools, and all will equally admit that such teaching is of the highest importance. Moreover, it must be total abstinence that is taught and not a compromise which admits moderate drinking as the ideal to be reached. It is customary for teachers and superintendents of schools to criticize whatever instruction is attempted in the schools that has not yet been reduced to "pedagogical form." Many things thought necessary to be taught in the schools, such as manual training, cookery, temperance, and natural science, for example, have not been as yet reduced to the form of "progressive lessons." Arithmetic, geography, history, and grammar have been long since reduced to a "pedagogic form," and the first lesson or the first five lessons are good and valuable if no more lessons are given. The earlier lessons prepare the pupil step by step for the later lessons. In the new branches above mentioned the necessary steps to connect one point with the next are lacking and the instruction can not be made so thorough as it is made in the course of lessons in reading, writing, and arithmetic.

Admitting this, I think it explains the disparagements written regarding temperance instruction which we find in some of the reports of the superintendents of schools. On the other hand, I think that it will be admitted that instruction in what is called "scientific temperance," conducted as it is under the laws of all the States, in the public elementary schools, furnishes a permanent and active means for the dissemination of correct views regarding the effect of intoxicating drinks upon the human body. The pupils will have their attention called to the subject every year and the intelligent ones will understand with some degree of clearness the results of scientific investigations in this matter. Even the dull pupils who fail to seize the scientific points will carry away an impression in their minds that intoxicating drinks are very dangerous and should not be used even in moderate quantities. It is an undoubted fact that a moderate use of intoxicating liquors is liable to lead, especially in predisposed organisms, to "alcoholism." Total abstinence is the only safe course with such persons, and no one can tell in advance what person can safely become a moderate drinker of alcoholic beverages in any form.

Dull pupils, and I may say all pupils, if taught by incompetent teachers, will fail to master the scientific evidence on which these conclusions are based. The examination papers of such pupils will provoke ridicule if made public. This is true not only in regard to temperance instruction, but in regard to instruction in all branches of natural science, manual training, history, religion, and whatever

other branches of useful information are taught in schools without having first been carefully reduced to pedagogic form. But very useful results are attained in these subjects notwithstanding. The scientific temperance instruction required in the several States of this nation is certainly a permanent and efficient source for the promulgation throughout the community of correct opinion regarding the effects of intoxicating beverages upon the body. Such instruction, too, is sure to furnish the greater number of the intelligent pupils in schools with a tolerably correct notion with regard to the scientific investigations which have furnished the evidence for these conclusions. The utter destruction to the body and mind which comes from habitual intemperance and the danger of moderate drinking in arousing an abnormal appetite for intoxicating liquors will certainly be seen and understood by the great mass of pupils that attend the public schools. It may be said that this movement is the most effective one ever devised by the friends of temperance to abate a great evil, one of the greatest evils abroad in the land.

Relations of the National Government to higher education and research.—The substance of an address on this subject before the University of Chicago by Director Charles D. Walcott, of the United States Geological Survey, forms Chapter XXII. The different ways in which the Federal Government has aided higher education are reviewed in some detail. This assistance until recent years usually took the form of grants of land, though some grants of money were made in the case of technical education. In 1892 a further step was taken by the Government in the direction of promoting higher education and research; by a resolution of Congress approved April 12 of that year, and amended in 1901, the literary and scientific collections of the Government departments were made available for study and research to duly qualified students. Mr. Walcott gives in the course of his address a summary account of the situation in relation to the founding of a national university, and of the Washington Memorial Institution.

The Carnegie Institution.—Chapter XXIII contains various documents and authoritative statements relating to the Carnegie Institution of Washington, D. C., its organization, objects, methods, etc. A list of the principal educational benefactions of Mr. Andrew Carnegie is appended, together with some notice of his gift in aid of university education in Scotland.

Education in France.—Chapter XXIV presents an historical and descriptive survey of the comprehensive system of public education in France and of the complementary system maintained by church authorities. The history is an integral part of the history of the Republic, which has fostered education as an essential condition of its existence. Hence the progress of the public or State system affords an index of the growing stability of the existing government. The

traditional distinctions between primary or popular education and the liberal education of the higher classes are preserved in the organization of the present system, which comprises three departments: primary, secondary, and higher. The distinction between the two last-named divisions is merely nominal—secondary education comprising the colleges for general education preparatory to the specialized higher or university education. The efforts of the Republic in respect both to the colleges (*lycées*) and the universities have been directed to the increase of their resources and the revival of the free and powerful activities which were repressed under the Napoleonic or Imperial University. The primary system is essentially the creation of the Republic and therefore most deeply involved in its life. The principles upon which it is based are the outcome of the revolution of 1789. Their embodiment in law was a gradual process, extending through a century of effort, as shown in the chapter under consideration. As a public service primary education dates from Guizot's law of 1833, passed in the brief calm of Louis Philippe's reign. This law recognized church schools, providing for public schools simply as a means of supplementing the deficiency of the former. Like the later English law of 1870, it indicated a serious intention of preventing gross illiteracy among the common people. It was estimated at the time of its passage that 7,000 or 8,000 communes (about one-fourth of the whole number) were destitute of schools and that as many more had only worthless schools. The effects of the law were apparent in a rapid increase of school enrollment, which continued with varying fluctuations until the coup d'état of 1851.

The permanent contribution of Guizot's law to the cause of popular education was the clause obliging communes to maintain a primary school; the principle of local responsibility thus legally sanctioned has never since been ignored. Scarcely less important was the requirement that every department should maintain a normal school. Not only was the principle of professional training for teachers thus established, but the machinery was devised for its uniform application throughout the country. The principle of local obligation was extended by a law of 1867, passed during the reign of Napoleon III at the instance of Minister Duruy. This law made the maintenance of a separate public school for girls obligatory upon every commune having 500 or more inhabitants. The response with which it met indicated the growth of local interest in education. Within twelve years above 2,000 new schools were opened, of which 1,580 were for girls. The present Republic was proclaimed September 3, 1870; but the siege of Paris and the humiliations and distractions of the country precluded for a time attention to education. The serious purpose of the Government in this respect was first manifested by the law of June 1, 1878, creating a fund of 120,000,000 francs for the erection of school-houses. The year following began the memorable ministry of Jules

Ferry, who consecrated all his abilities to the cause of popular education. His first efforts were directed to administrative reform; there followed in rapid succession the laws which have given an exclusively civic or national character to public primary schools, namely, the law reaffirming the obligation of every commune to maintain a school which should be free and secular; requiring all teachers, public and private, to be provided with State diplomas; and making it compulsory upon parents to secure the education of their children either in public schools or by private means. In the State schools nothing was left to chance or caprice; the law of October 30, 1886, prescribed minutely all particulars respecting the conduct of schools, their classification, inspection, studies, etc. In virtue of these regulations and the efficient supervision of the State, the humblest commune in France is assured of an efficient school. From the detailed statistics given in Chapter XXIV it appears that out of the total of 36,520 communes only 87 are now destitute of a public school, and that 92 per cent of the communes having 500 or more inhabitants have a separate school for girls. The enrollment in primary schools increased steadily up to 1889-90, reaching in that year a total of 5,623,401, or 14.7 per cent of the population, as against 5,539,299 in 1898-99, or 14.3 per cent of the population. The slight decline which has taken place in the intervening decade is attributed to the actual decrease in the school population, to the rapid advance of pupils in the primary schools, with the result that the leaving certificate is obtained at an earlier age than formerly, and to the less vigorous enforcement of the obligatory school law. The relative enrollment in public and in private schools for successive years (Table III) shows between 1887-88 and 1898-99 a slight decline in the proportion of public school enrollment, i. e., from 79.9 per cent of the total to 75.3, and a corresponding increase in the proportion of private school enrollment, i. e., from 20.1 per cent to 24.7. This change appears to be due to the law of 1886 forbidding the employment in public schools of teachers belonging to religious orders. As regards the schools for boys, the law was to take effect by 1891, and consequently public schools for boys are now completely secularized. Considering the prejudices which the law had to encounter the effect upon public school attendance appears to have been slight. This may be taken as an indication of increasing confidence in the public schools. One of the most important evidences of the actual efficiency of schools is furnished by the item of average daily attendance. This item is approximately indicated in the official statistics of France by a comparison between the enrollment in the months of December and June, the months, respectively, of highest and lowest school attendance, and the number present on a selected day in each of the months named.

On this showing the attendance upon public schools was in December 89.8 per cent of the enrollment and in June 84.6 per cent. The

corresponding rates for private schools were 93.4 per cent and 92.3. Both in this respect and in respect to the number of classes and the number of pupils to a teacher the advantage appears to be with the private or church schools. This is explained in part by the fact that the latter are most numerous in the large cities and towns. Furthermore, for every such school there is always more than one "brother" or "sister," as the case may be. There are about 30,000 nuns and 9,000 members of brotherhoods engaged in the schools, and their number can be almost indefinitely increased. They live, it is stated, with their respective orders and receive not a penny of salary for their work, to which they are passionately devoted. On the other hand, the public schools are better organized than the private and have a larger proportion of teachers who have obtained professional diplomas (Tables VII and VIII). The remarkable progress made by France in securing trained teachers for its public schools is due in great measure to the liberal provision for normal schools and the high standard at which these are maintained. In continuance of the policy begun by Guizot, every department (civil divisions, now numbering 90) maintains two normal schools, either of itself or in union with another department, one for men and one for women. The professors for these local normal schools are carefully trained in two higher State normal schools. The State also assures to every public school teacher a minimum salary, ranging from 1,000 to 2,000 francs (\$200 to \$400) for men and for women 1,000 to 1,600 francs (\$200 to \$320). This amount is generally increased by the communes, which must at least furnish a house or its money equivalent to the teacher. Primary teachers are also borne on the State pension list. Thus, the position of a primary teacher is one of security and of assured though modest income.

The total current expenditure for primary education more than doubled in the two decades, 1877 to 1897, increasing from 94,397,554 francs (\$18,879,510) to 214,015,250 francs (\$42,803,050), or from \$4.69 per capita of enrollment in public primary schools to \$9.20 per capita. The part of the State in this expenditure rose during the period from 25 per cent to about 67 per cent, and that of the local authorities declined proportionately. It is estimated by M. Levasseur that the current expenditure for private primary schools (not State aided) would raise the total for 1897 to 293,000,000 francs (\$58,600,000), or, including cost of buildings hired and interest on the amount invested in school property, to 350,000,000 francs (\$70,000,000).

The solicitude of the State for the education of the masses does not stop with the elementary primary school, as is shown by the development of higher primary schools and the adaptation of their individual or technical departments to local demands. The movement for the continued moral and intellectual training of the masses beyond the brief period of school life, recognized in Duruy's law of 1867, but long

left almost entirely to private efforts, has received substantial aid from the Government since 1895, both in the form of an annual appropriation and by the loan of illustrative material. In 1900 not less than 38,291 courses of lectures were given in various parts of France, with a total of 540,000 regular attendants. Both through these popular conferences and the societies for promoting the industrial welfare of the youthful pupils and providing them with innocent amusements, the schools have become centers of a remarkable movement for the social uplifting of the masses. This movement has been in part inspired by hostile arraignments of the moral influence of secular schools. The endeavor to fasten upon them the responsibility for an alleged increase in juvenile crime has, however, signally failed—(1) by the accumulation of statistics showing their opposite tendency, and (2) by evidence that the increase in youthful depravity is among the vicious and vagabond classes, who escape the influence of the schools to fall under that of a pernicious press and of intemperate habits. A summary of the facts bearing upon this important problem is presented, supplemented by a detailed account of the system of moral training, which is rapidly infusing an ethical spirit into primary instruction.

As regards secondary education, two recent events of great significance are discussed. The first of these relates to a legislative measure for the reform of the public secondary schools (State lycées and local colleges); the second to efforts for the repression of antirepublican tendencies in the independent or clerical schools. The most important feature of the reform measure noted above is that for the recognition of three distinct but equivalent courses in the lycées, i. e., a course including both Latin and Greek, a course with Latin, and a course in which modern languages replace the classics. The grounds on which the proposition is supported are cited in this chapter. Outside government circles the project is seriously criticised as an endeavor to burden the lycées "with specialties which even in the law are stamped as foreign to the purpose and spirit of liberal education." The law of July 1, 1901, defining the conditions under which associations may legally exist and work in France, was professedly intended to subordinate the religious orders to the civil authority. As these orders control a large proportion of the secondary schools of France, the law is really an educational measure of deep import. The terms which it imposes and its effects in dispersing the members of the orders are briefly stated.

As regards higher education, statistics are given and citations from official reports showing the continued development of the universities under the law of 1890, which restored to them in large measure the independence which was lost by their absorption into the State university or teaching system. Fifteen universities have been organized under the law and all give signs of renewed life and vigor. The

increase of laboratory facilities and the multiplication of endowed professorships are noticeable features of the record. The number of university students rose from 17,605 in 1887 to 29,377 in 1900. The provincial universities have gained relatively much more than the Paris University, the total increase for the former in the period being 8,720 students, a little more than 100 per cent, and for the Paris University 8,460 students, about 33 per cent. The recent arrangements facilitating the admission of foreign students to the French universities, including admission requirements, fees, and diplomas attainable, are given in full.

Higher commercial education.—The movement for the establishment of courses of study designed particularly for the higher education of business men, especially in the lines of commerce and finance, is making considerable progress. The first institution to offer such special courses was the Wharton School of Finance and Economy of the University of Pennsylvania, which was established in 1881 on an endowment of \$100,000, given by Mr. Joseph Wharton, of Philadelphia, Pa., who afterwards gave an additional sum of \$25,000 to establish a library fund for the school.

In 1889 the education of business men was made the subject of a special inquiry by the American Bankers' Association. As a result of the inquiry the association requested the universities and colleges of the country to establish schools of finance and economy on the plan of the Wharton School of Finance and Economy. During the past few years colleges and courses under various designations, but having for their object the higher education of persons who desire to enter upon business careers, have been established by a number of universities and colleges. Descriptions of such courses with detailed statements concerning the instruction offered, so far as they could be obtained, are given in Chapter XXV.

Coeducation of the sexes in the schools and in the colleges and universities of the United States.—In Chapter XXVIII I have brought together old and new matter relative to the coeducation of the sexes in the schools and in the colleges and universities of the United States. While the policy is not entirely peculiar to this country it has here so much wider an extension than elsewhere, that whenever it becomes a subject of discussion or experiment the school records of the United States are consulted for precedent and for arguments. It is the purpose of this chapter not only to bring together the facts relative to the present status of coeducation in our schools and higher institutions, but also the strongest arguments (pro and con) pertaining to this policy and the widest experience in respect to its application. As regards the public schools, it is shown that the education of boys and girls in the same classes is a very general practice in the grades below the high school, the only exceptions being isolated cases of schools and city school systems which for some cause, historical or

local, can not be adjusted to the prevailing condition. The same is true of the vast majority (at least 98 per cent) of the high schools of the country. In a few cities, situated for the most part on the eastern border of the country, separate high schools for boys and girls are maintained and advocated. The causes of these exceptional conditions are shown in this chapter by statements of city school superintendents thoroughly conversant with the situation. As the public schools enroll 15,840,000 children and youth, or 91 per cent of all pupils in elementary and secondary schools, it is readily seen that their policy in a matter like this must profoundly affect public opinion and the solution of many social and industrial problems. That the minority who would prefer separate instruction for boys and girls is very small is further indicated by the fact that more than half of the secondary private schools of the country are coeducational. This association of boys and girls in the school undoubtedly explains in a measure the freedom that women enjoy in respect to the pursuit of intellectual careers. In the public secondary schools women form 50 per cent of the teaching force. The extent to which women share in the directive service of public education will be seen by reference to the tabulated statement of the supervisory school offices which they may hold or for whose incumbents they may vote. The adoption of coeducation in the colleges and universities of the country is related to the general movement for the higher education of women. This movement, beginning in the earlier years of the nineteenth century, assumed national extent and importance through the cooperation of several causes, of which the most potent was the passage of the Government land grant act of 1862 for the endowment of colleges making special provision for the branches of learning that are related to "agriculture and the mechanic arts." The history of this general movement as related to the policy of coeducation is briefly reviewed in the chapter under consideration. In the western division of the country all influences promoted the admission of women to the highest institutions on the same terms as men. In the more conservative East the movement was toward separate endowments for women, such as Vassar, Wellesley, Smith, and others. From these extremes two modifications have arisen, namely, that of "annexes" for women, such as Radcliffe and Barnard, and that of coordinate colleges, as at Western Reserve and Brown universities.

These different policies show a wise regard for local conditions, and this spirit gives significance to the fact that the number of coeducational colleges and universities is steadily increasing. Starting with Oberlin College, Ohio, in 1833, the policy of coeducation had spread by 1880 to 51.3 per cent of the colleges and universities of the country. In 1900 the proportion had risen to 71.6 per cent. In this number are included 30 State universities and 14 private universities of high order.

The dearth of scholarship and fellowship funds available for women students is in somewhat striking contrast to the generally liberal provision for men students in this country. The particulars set forth under this head indicate a growing interest in this matter.

Under the head of the "Literature of coeducation" will be found citations from reports and other publications of officials in charge of public school systems, presidents of universities, specialists, and other representative men, treating of the policy in question. The purpose in this selection has been to bring together for ready reference the strongest arguments, affirmative and negative, and the widest experience pertaining to this important feature of our educational policy.

The Philippines.—Mr. F. W. Atkinson, superintendent of public instruction in the Philippines, has forwarded to the Bureau a full account of the present educational movement in the islands, and from this important document, which appears as Chapter XXIX, I take the following account of the situation of the public school system there:

Before the arrival of the Americans in the archipelago the Spanish system of public instruction, which in its modern form was inaugurated in 1863 by royal decree, consisted of a normal school in Manila for training teachers and separate primary schools for males and females in the various towns of the islands, besides a number of special schools. The criticisms of the methods of instruction in these schools, noted in the Report of the Bureau for 1899-1900 (Chapter XXIX), Mr. Atkinson repeats, and adds some comments upon the text-books formerly used. Soon after the Americans took possession the military government interested itself in the subject of schools, introduced some American text-books, and detailed soldiers as teachers, especially of English. General Otis took particular interest in the matter, and desired the army officers to open as many schools as possible. The district commanders appointed officers to act as superintendents, among whom were many chaplains. About 1,000 schools were in operation under military rule. Their equipment was inadequate, and the old Spanish text-books were used. The commanding officers were unanimous in urging that English be taught in the schools on account of the assistance the knowledge of English on the part of the people of the Philippines would be to them. Capt. Albert Todd, in charge of public instruction under the military government, recommended that all the schools under Government control be conducted in the English language as far as practicable and that Spanish and the dialects be eventually dispensed with, and, further, that the Government schools be absolutely divorced from the church. This period marks the transition from the Spanish management of the schools to the American, which may be regarded as beginning with the appointment of Mr. Atkinson as general superintendent of education. On September 1, 1900, Mr. Atkinson introduced a new organization

of the public schools which was modeled on the American system, but different from that in certain features which the conditions in the islands required. He mentions as especially necessary a centralized control of the school system, with careful supervision through provincial and district superintendents. Upon his recommendation the Philippine Commission passed an act establishing the present system of education in the islands. This is the law published in the Report of this Bureau for 1899-1900.

The chief characteristic of the present organization is centralization. The education staff comprises the secretary of public instruction (who is a member of the Philippine Commission); the general superintendent of public instruction for the Philippine Islands; 18 division superintendents; 45 deputy division superintendents; 1,000 primary and 200 higher teachers of English, and about 3,400 native teachers, together with a superior advisory school board and local boards. The superior advisory board consists at present of the general superintendent of public instruction (Mr. Atkinson) and 4 Filipinos. Interesting biographical sketches of these latter members are given, from which it appears that they are educated and competent men. The school boards in the municipalities, consisting of from 5 to 7 members, one of whom is the presidente of the municipality, are composed of responsible and influential landowners when possible. One-half the members are elected by the municipal council, and the other half are appointed by the division superintendent. It may be difficult to get these local boards to show much enthusiasm for the primary schools, because they are drawn from the wealthy and educated classes of the municipalities who have the hereditary feeling of their caste of indifference toward the common people. "They are no more interested than is necessary," says the report. The common people themselves generally, however, desire education and opportunity.

The work done so far under the American organization is summed up as follows: An education bill has been enacted; the archipelago has been divided into 17 divisions and an American school superintendent placed in charge of each, with deputies in each province; 1,000 American teachers for primary work have been appointed and distributed to their stations, and 200 for secondary work are being appointed. About 200 soldiers had been detailed as teachers until recently, while 3,400 Filipino teachers have been appointed. More than three-quarters of a million American schoolbooks have been purchased, together with a very great quantity of school supplies, including 20,000 modern school desks. Instruction in the English language has been provided for in about 1,500 schools, in which over 200,000 children are enrolled. Night schools for adults and those unable to attend during the day have been opened throughout the archipelago, and are working successfully with an enrollment of about 25,000.

The salaries of the Filipino teachers have been increased, and a definite announcement made to them that the American teachers are not introduced to displace them but to prepare them to take charge of their own schools. They receive daily instruction in English, and when sufficiently advanced they are taught the common branches and the methods of teaching them. Vacation normal courses have been organized in the various school divisions, and permanent normal schools, tributary to the Manila normal school, have been established in the provinces. Industrial and trade schools are established and will be increased in number, and agricultural schools are in process of organization. In pursuance of the idea of gradation from the primary schools to the university, "grammar high schools" have become a part of the school system, recommendations have been made for the establishment of schools of painting, sculpture, drawing, and music, and the plans of a technical school and also of a university, to be established in Manila, have been discussed.

The reports from the superintendents of schools in the different provinces are very instructive. They present, as far as schools are concerned, a good idea of the different intellectual conditions prevailing in the various provinces, some of the inhabitants being highly civilized while others are very backward, a state of things which is not surprising when one remembers that there are a great many tribes and peoples in the Philippines, ranging in the scale of civilization from "head-hunting" barbarians to cultivated people with European tastes and education. The reports represent the generally unsatisfactory condition of the schools for the common people, and point out the educational needs of the latter. It is noticeable that the wealthy families, even in the remote provinces, send their children to Manila and Hongkong to be educated. The intellectual quickness of the Filipino children is frequently remarked. The desire to learn English seems to be general. In many places the time of the American teachers could be fully taken up in teaching English alone to adults.

Many extracts from letters of governors of provinces are given in Superintendent Atkinson's report, all going to show the beneficial influence of the new schools and of the American teachers. From the answers to a list of questions sent to the teachers relating to the intellectual qualities of the Filipino children the following interesting points are obtained: The Filipino boys "were found to take by far the greatest interest in arithmetic, next preferring English, drawing, writing and reading, in the order named. The girls show the greatest interest in English, reading, spelling, drawing, writing, music; their interest in English (their favorite subject) is not so marked over the other subjects as the interest of the boys in arithmetic. Among the native games the boys take great interest in kites, pitching pennies, native football, and leapfrog, introducing the element of gambling

wherever practicable." They take kindly also to new games, such as football, baseball, prisoners' base, catch, duff, and hopscotch. The girls do not as a rule take as much interest in games as the boys, but many play a kind of marbles, native hopscotch, running games, song-and-dance games, and jackstraws. The teachers have also introduced other games which they appear to enjoy. A very large majority of the teachers remark upon the superiority of the Filipino child in imitation, memory, and courtesy. On the other hand, he is described as falling short in reasoning, in activity, in morality, and in ambition. The insular treasury pays the salaries of the American supervisors and teachers, their traveling expenses, office rent of superintendents, the cost of text-books and supplies, and their transportation to the various towns. The salaries of Filipino teachers, together with the cost of local school buildings and their equipment, are paid by the municipalities. The expenditure for education from July 1, 1901, to February 1, 1902, was \$777,585.42. The average monthly pay roll of the American supervisors and teachers is approximately \$100,000. The estimated monthly pay of Filipino teachers is \$37,756.

Education in Alaska (Chapter XXXI).—The report of the general agent shows that there were 28 public schools under the immediate supervision of this Bureau maintained in Alaska during the school year 1900-1901; these schools were taught by 37 teachers, and had a total enrollment of 1,963 pupils. On account of the prevalence of small-pox in southeastern Alaska during the spring of 1901 several of the schools in that section were temporarily closed. The cost of conducting the schools per capita of enrollment was \$17.78. The appropriation for education in Alaska, which had been made annually since 1886, was discontinued by the last Congress. The "act making further provisions for a civil government for Alaska," approved March 3, 1901, prescribes that 50 per cent of all license moneys for carrying on business outside the incorporated towns of Alaska be set aside and expended in the discretion of the Secretary of the Interior for school purposes outside the incorporated towns.

The statements of the teachers of the different districts which the general agent has incorporated in his report give in considerable detail the results of their labors the past year; the peculiar difficulties encountered in maintaining an efficient system of public schools in that remote and thinly settled region, with its rigorous climate, are made very manifest by a perusal of these statements. The information contained in them is supplemented by reports of the educational work in Alaska of the different church missionary associations.

Introduction of reindeer into Alaska (Chapter XXXII).—Since 1891, when the first reindeer were purchased, up to the present time, 1,320 reindeer have been brought into Alaska from Siberia. From these, 4,462 fawns have been born. Deducting those which had been killed

for food or had died from accident or disease, there remained 4,164 in the herds October 1, 1901, against 3,323 in 1900. The native Eskimo herders, in the estimation of competent judges, have been found to possess sufficient intelligence and aptitude for their work and have proved themselves competent after having been properly trained; several instances are given in which natives acquitted themselves with credit in managing reindeer in emergencies demanding skill, judgment, and endurance. A number of reindeer of unusual stature were obtained in the summer of 1901 in the region back of Ola, in Siberia, west of the Sea of Kamchatka, and brought to Alaska for breeding purposes, 254 in all having been landed. It is hoped with these to further improve our present stock and provide for Alaska a breed of reindeer superior to that of any other country. Use is being made of reindeer in Siberia, both by the Government and by private enterprise, in the transportation of merchandise; the important part these animals are playing there is suggestive of what may be accomplished through their aid in the development of Alaska. Already reindeer teams are employed in the latter Territory to a considerable extent in transporting men and supplies to mining camps and outlying stations; as their number increases they will more and more take the place of dogs for these purposes. During the past winter a detachment of United States troops engaged in constructing a Government telegraph line became snow-bound near Kaltag on the Yukon River; their mules were unable to make any progress even after the soldiers had shoveled a trail for them in the deep snow. In this emergency, at the request of General Randall, in command of the Department of Alaska, deer teams were sent to their relief from the Eaton reindeer station and brought the troops and their camp equipment through the snow to a place of safety. Deer teams were also employed during the winter in drawing telegraph poles from the woods. By Executive order of March 30, 1901, two specified tracts of land were set apart and reserved for reindeer stations.

City school systems (Chapter XXXIV).—By the steady increase in population of the cities and villages of the country the list of cities of over 8,000 inhabitants receives constant additions. From year to year new cities are added to the list when their populations are estimated to have passed the 8,000 mark, these estimates being based on the data of the last census, the growth of the city during the ten years preceding, and the reported present school enrollment. Thus the list of city school systems in cities of over 8,000 inhabitants numbered in 1900-1901 582, again of 14 over 1899-1900. This change in the list should be considered in making comparisons with the statistics of previous years. The entire enrollment in the city schools of the United States for 1900-1901 was 4,090,819, an increase of 141,258, or 3.58 per cent, over the previous year. The rate of increase in enrollment varies

greatly in the several divisions, being notably greatest in the South Atlantic division, where it is nearly 10 per cent, and falling to less than 2 per cent in the North Central division. The enrollment in primary schools shows a decrease in every division except the Western, the decrease for the United States being 32,238, or 3.47 per cent. In regard to supervision, a movement, temporary in its character, is noticed tending toward the reduction of the number of supervising officers. The city of New York furnishes a noteworthy instance of this, for the number of supervisors reported for 1900-1901 shows a loss of 76 from the number reported in 1899-1900, while at the same time 908 places were added to the list of teachers. For the United States the whole number of supervising officers is 4,733, less by one than the total of the previous year, while the number of teachers, 87,561, shows a gain of 4,068. All of the five divisions share in the relative reduction of the list of supervisors, which reduction is greatest in the North Atlantic and South Atlantic divisions. It will also be noted that women supervisors were the principal sufferers in the cutting down of the force. In the case of New York City, cited above, 74 of the 76 positions lost were held by women, and for the United States the number of female supervising officers is less by 59 than in 1899-1900, against a gain of 58 in the number of male supervisors. This is in decided contrast to the marked tendency of several years past. The per cent of increase of male teachers, also, is slightly greater than that of women. A significant fact disclosed by the statistics is the relatively large increase in the amounts expended for tuition or for the teaching force, the rate of increase being greater than that of any other item. The expenditure for tuition was \$63,433,167, a gain of \$4,249,601, or 7.18 per cent. This raises the average annual salary of the city teacher from \$670.81 in 1899-1900 to \$687.29 in 1900-1901. The total expenditure was increased by \$8,206,551, or 8.25 per cent.

Recently there has been much discussion of the municipal expenditures, with a view to arrive at the normal ratio which the cost of one department should bear to another. Of course it is admitted that conditions differ in different cities and that local causes peculiar to one city may make it reasonable or necessary to devote a larger ratio of its taxes to the police, or to street cleaning, to sewer building, or to sanitation, than another city may find to be necessary. But comparative tables throw light on the parts of the budget that vary from the average, and thus draw attention to the items that need explanation and are suspicious.

I give here the comparative statistics of 20 cities, showing expenditures for schools and for police—first, a table showing the educational statistics, with the cost for permanent improvements (grounds and buildings) included, and secondly, a table with this item omitted.

Total expenditure (including construction and capital outlay) by the 20 largest cities for public schools and for police departments.

[Data relating to police from Bulletin of the Department of Labor, No. 42, September 1902; that relating to schools from reports for corresponding dates made to the Bureau of Education; calculations made in the Bureau of Education.]

City.	Total spent for schools.	Spent for police.	Ratio.
New York	\$22,845,359	\$10,474,019	\$2.18 for schools to \$1 for police.
Chicago	8,577,622	3,890,741	\$2.21 for schools to \$1 for police.
Philadelphia	4,223,278	3,119,981	\$1.35 for schools to \$1 for police.
St. Louis	2,123,020	1,627,235	\$1.30 for schools to \$1 for police.
Boston	4,007,264	1,778,353	\$2.25 for schools to \$1 for police.
Baltimore	1,426,031	967,823	\$1.47 for schools to \$1 for police.
Cleveland	2,413,548	483,015	\$5.00 for schools to \$1 for police.
Buffalo	1,440,714	793,294	\$1.82 for schools to \$1 for police.
San Francisco	1,169,845	789,251	\$1.48 for schools to \$1 for police.
Cincinnati	1,154,301	563,268	\$2.05 for schools to \$1 for police.
Pittsburg	1,407,003	490,287	\$2.87 for schools to \$1 for police.
New Orleans	589,480	231,374	\$2.55 for schools to \$1 for police.
Detroit	1,251,826	570,207	\$2.20 for schools to \$1 for police.
Milwaukee	852,572	342,508	\$2.49 for schools to \$1 for police.
Washington	1,485,695	703,819	\$2.11 for schools to \$1 for police.
Newark	931,387	428,495	\$2.17 for schools to \$1 for police.
Jersey City	634,154	430,241	\$1.47 for schools to \$1 for police.
Louisville	555,812	273,615	\$2.03 for schools to \$1 for police.
Minneapolis	839,090	216,698	\$3.87 for schools to \$1 for police.
Providence	799,767	371,875	\$2.15 for schools to \$1 for police.

Expenditure by the 20 largest cities for maintenance and operation of public schools and of police departments.

[Data from Bulletin of the Department of Labor, No. 42, September, 1902; calculations made in the Bureau of Education.]

City.	Spent for schools, building omitted.	Spent for police department.	Ratio.
New York	\$19,731,629	\$10,199,206	\$1.93 for schools to \$1 for police.
Chicago	8,203,493	3,685,982	\$2.23 for schools to \$1 for police.
Philadelphia	3,319,604	3,036,264	\$1.09 for schools to \$1 for police.
St. Louis	1,526,140	1,602,182	\$0.95 for schools to \$1 for police.
Boston	3,043,640	1,754,151	\$1.73 for schools to \$1 for police.
Baltimore	1,417,392	967,823	\$1.46 for schools to \$1 for police.
Cleveland	1,257,345	417,932	\$3.01 for schools to \$1 for police.
Buffalo	1,161,834	793,294	\$1.46 for schools to \$1 for police.
San Francisco	1,166,763	789,251	\$1.48 for schools to \$1 for police.
Cincinnati	1,126,631	555,185	\$2.03 for schools to \$1 for police.
Pittsburg	843,648	490,287	\$1.72 for schools to \$1 for police.
New Orleans	478,025	231,374	\$2.07 for schools to \$1 for police.
Detroit	869,713	542,049	\$1.60 for schools to \$1 for police.
Milwaukee	764,968	342,508	\$2.24 for schools to \$1 for police.
Washington	1,182,916	687,922	\$1.72 for schools to \$1 for police.
Newark	830,081	428,495	\$1.94 for schools to \$1 for police.
Jersey City	500,332	421,616	\$1.16 for schools to \$1 for police.
Louisville	512,947	273,615	\$1.87 for schools to \$1 for police.
Minneapolis	736,981	216,698	\$3.40 for schools to \$1 for police.
Providence	739,695	371,875	\$1.99 for schools to \$1 for police.

Higher education.—Chapter XXXV contains the usual statistics concerning institutions for higher education, with an additional table giving the number of students in the various courses of study in each institution so far as reported. The number of undergraduate and resident graduate students in universities and colleges for men and for both sexes, colleges for women (Division A), and in schools of technology, for the year 1900-1901, is reported as 103,351, an increase

of 4,428 students over the number for the preceding year. The number of students for each year from 1889-90 to 1900-1901 is as follows:

Year.	Universities and colleges for men and for both sexes.		Colleges for women, Division A.	Schools of technology.		Total number.	
	Men.	Women.	Women.	Men.	Women.	Men.	Women.
1889-90.....	38,056	8,075	1,979	6,870	707	44,926	10,761
1890-91.....	40,633	9,459	2,265	6,131	481	46,220	12,185
1891-92.....	45,682	10,580	2,636	6,151	481	51,763	15,507
1892-93.....	46,689	11,459	3,138	6,616	843	55,305	18,530
1893-94.....	50,297	13,144	3,578	9,467	1,376	59,814	19,071
1894-95.....	52,586	14,298	3,657	9,467	1,106	62,053	19,071
1895-96.....	55,556	16,746	3,910	8,587	1,065	65,143	21,721
1896-97.....	55,755	16,536	3,913	8,907	1,094	64,662	21,543
1897-98.....	58,407	17,765	4,416	8,611	1,239	67,018	23,470
1898-99.....	58,467	18,943	4,593	9,038	1,339	67,505	24,880
1899-1900.....	61,812	20,452	4,872	10,347	1,440	72,159	25,764
1900-1901.....	65,069	21,468	5,260	10,493	1,151	75,472	27,879

Of 91,288 students whose classification according to the courses of study pursued was reported, 63,843 are reported in classical and other general culture courses, 9,081 in general science courses, 3,843 in agriculture, 391 in architecture, and 14,130 in the various branches of engineering. The first school of mines in the United States was established at Columbia College (now Columbia University), in the City of New York, and was opened to students in 1864. At the present time the institutions offering courses of study in mining engineering number 37, having more than doubled during the past ten years. This does not include institutions in which a limited amount of instruction in mining engineering is included in civil engineering courses. Short statements concerning the mining engineering courses, with a description of the special mining equipment and the field work required during the course of study, are given in Chapter XLV. The degree of bachelor of arts is now the only degree conferred by 137 universities and colleges for the completion of a liberal course of study. The degrees of bachelor of philosophy, bachelor of literature, and bachelor of science (except for technical courses) are no longer used in a considerable number of institutions, and the degree of bachelor of arts is conferred in their stead. Table 28 of this chapter shows the institutions conferring the several degrees. The total number of degrees conferred for work done (excluding degrees in law, medicine, and theology) was 16,513, of which number 11,463 were conferred on men and 5,050 on women. The degree of doctor of philosophy was conferred by 42 institutions on 312 men and 31 women on examination, and by 14 institutions on 35 persons as an honorary degree. The total value of all property held by institutions for higher education amounts to \$391,230,784, a gain of \$30,636,189 over the amount for the preceding year. The endowment funds amount to \$177,127,965, and the remainder represents the material equipment of the institutions. The total income was \$33,259,612, and the

benefactions received by the several institutions during the year amounted to \$18,040,413.

Professional schools (Chapter XXXVI).—The number of students in theology in 1900-1901 was 7,567, a decrease of 442 from the previous year, and of 804 from the number in 1898. This continued decrease in the number of theological students is in marked contrast with the rapid growth in the numbers studying law, medicine, and dentistry. The value of grounds and buildings of theological schools is reported at \$15,217,164, and the endowment funds aggregate over \$21,000,000. Law students numbered 13,642, an increase of more than 1,000 in one year. The growth in the number of law students can be appreciated more fully by contrasting the number in 1891 with the number in 1901, namely, 5,252 with 13,642, an increase of 160 per cent in ten years. Medical students numbered 26,757, an increase over the previous year of 1,544. The year 1901 was unusually favorable to medical education, in view of the gift to Harvard Medical School of over \$1,000,000 by Mr. J. P. Morgan, and the subsequent announcement of the gift, on certain conditions, of a like sum to the same institution by Mr. John D. Rockefeller. Students in dentistry now number 7,308; in pharmacy 4,429.

Agricultural and mechanical colleges.—In Chapter XXXVII are given in considerable detail the statistics concerning the institutions making special provision for instruction in agriculture and the mechanic arts, endowed by the acts of Congress approved July 2, 1862, and August 30, 1890. According to the reports of the presidents of the several institutions the various States received from the General Government under the act of July 2, 1862, an aggregate amount of 10,320,843 acres of land, of which 1,030,572 acres remain unsold. The invested funds realized from the sale of these lands amount to \$10,806,780, yielding an income of 6.3 per cent. The total income of these institutions for the year ended June 30, 1901, excluding appropriations for experiment stations, was \$7,325,604. Of this amount the States and Territories granted \$3,073,736, the income from Federal sources was \$1,937,136, from students' fees \$960,621, from endowment other than Federal or State sources \$553,503, and from miscellaneous sources \$800,608. The value of all property held for the benefit and use of the institutions amounts to \$68,084,925, the value of additions to the equipment during the year having been \$1,932,058. The total number of students in the agricultural and mechanical departments was 29,950. The establishment of short practical courses, especially in the line of agriculture, has continued during the year and is doing much toward bringing these institutions into closer touch with the people in the agricultural districts of the several States. The number of students in the technical courses shows a decided increase during the past few years. Mention is made in this chapter of the changes in the courses or methods of instruction, and a description of new

buildings erected during the year is given so far as reported. A considerable amount of aid is granted to students in the way of paid labor. Ten States made specific appropriations for this purpose, amounting to \$27,500, during the year. The total amount expended for student labor was \$160,477. The average amount earned by 4,868 students was \$32 per annum. The highest average paid by any institution was \$200 and the lowest was \$1 per student. In addition to the work at the institutions a large amount of time is given to outside work, especially at farmers' institutes. Twenty-three States are reported as making special appropriations for farmers' institutes, amounting to \$103,112. The amount of time given to this work during the year by officers of agricultural colleges and experiment stations was about 2,613 days. The number of institutes held was 1,497, with an estimated attendance of 445,144.

The organization of the institutions endowed by the acts of July 2, 1862, and August 30, 1890, differs very greatly. In some States, as in California, Minnesota, Nebraska, etc., instruction is offered in a wide range of subjects, comprising the studies included in general culture, technical, and graduate courses, as well as in the professional courses of law, medicine, dentistry, etc., while in other States, as in Massachusetts, Michigan, etc., the instruction is limited to technical subjects. In order to give an idea as to the scope of the several institutions a brief statement of the courses of study offered is included in this chapter. There is given also the announcement of the first session of the Graduate School of Agriculture, to be held for four weeks from July 7 to August 1, 1902, at the Ohio State University, under the auspices of that institution and with the cooperation of the United States Department of Agriculture and the Association of American Agricultural Colleges and Experiment Stations. Instruction will be given in agronomy, zootechny and dairying, and in plant and animal breeding. The faculty consists of 24 instructors and officers from 16 of the agricultural colleges and experiment stations and 6 officers from the Department of Agriculture, with Director A. C. True of the Office of Experiment Stations as dean.

Statistics of normal schools (Chapter XXXVIII).—It is estimated that at least half a million persons are engaged in teaching in the schools of the United States. This does not include private teachers and tutors. To furnish recruits for this vast army of teachers the normal schools and other institutions offering professional training for teachers are sending out nearly 15,000 teacher graduates a year. For the scholastic year 1900-1901 there were enrolled in public and private normal schools, public and private high schools and academies, and universities and colleges, 94,157 students pursuing training courses for teachers, in all public institutions there having been 57,689 such students, and in all private institutions 36,468. The 170 public normal schools had 43,372 of these students, the 118 private normal

schools 20,030; in 23 public universities and colleges there were 3,019 normal students, and 7,453 in 188 private universities and colleges; 494 public high schools had 11,298 such students, while 326 private high schools and academies had 8,985. Nothing will better illustrate the growth of normal schools in this country than the following table, which shows the amount of public appropriations for public normal schools each year since 1890:

Public appropriations for public normal schools for twelve years.

Year.	For support.	For build-ings.	Year.	For support.	For build-ings.
1889-90.....	\$1,312,419	\$900,533	1895-96.....	\$2,187,875	\$1,124,834
1890-91.....	1,285,700	409,916	1896-97.....	2,426,185	743,333
1891-92.....	1,567,082	394,635	1897-98.....	2,566,132	417,866
1892-93.....	1,452,914	816,826	1898-99.....	2,510,934	560,896
1893-94.....	1,996,271	1,583,399	1899-1900.....	2,769,003	718,507
1894-95.....	1,917,375	1,003,933	1900-1901.....	3,068,485	709,217

Statistics of secondary schools.—Chapter XXXIX is devoted to the statistics of public and private high schools and academies, with an introduction showing the number of secondary students in other institutions. The total number of secondary students reported to this office for the year 1900-1901 was 736,000, distributed among eight classes of institutions, as follows:

Secondary pupils in the United States.

Institutions.	Male.	Female.	Total.
Public high schools.....	224,584	317,146	541,730
Public normal schools.....	2,749	4,404	7,153
Public universities and colleges.....	7,287	2,570	9,857
Private high schools.....	53,813	54,408	108,221
Private normal schools.....	4,408	2,809	7,217
Private universities and colleges.....	30,016	14,785	44,801
Private colleges for women.....	.....	5,614	5,614
Manual training schools.....	6,818	4,589	11,407
Total.....	329,675	406,325	736,000

The 736,000 secondary students comprised 4.25 per cent of the entire school enrollment of the country, which was 17,299,230. Almost 1 per cent of the whole population was receiving secondary instruction. In the last ten years the rate of increase of secondary students has been more rapid than the rate of increase in population. The number of secondary students in private institutions has very nearly kept pace with the growth of population from year to year, while the number of such students in public institutions has increased from about 3,500 to the million in 1891 to about 7,200 to the million in 1901. In 1891 the total number of public and private secondary students was about 5,800 to the million, while the number in 1901 was about 9,500 to the million.

Leaving out of consideration the secondary students in preparatory departments of colleges and in other institutions, the following table

will illustrate the growth of public and private high schools proper since 1890:

Public and private high schools since 1889-90.

Year reported.	Public.			Private.			Total.		
	Schools.	Teachers.	Students.	Schools.	Teachers.	Students.	Schools.	Teachers.	Students.
1889-90.....	2,526	9,120	202,963	1,632	7,209	94,931	4,158	16,329	297,894
1890-91.....	2,771	8,279	211,596	1,714	6,231	98,400	4,485	14,501	309,996
1891-92.....	3,035	9,564	259,556	1,559	7,093	100,739	4,585	16,657	340,295
1892-93.....	3,218	10,141	254,023	1,575	7,199	102,375	4,793	17,340	356,398
1893-94.....	3,964	12,120	289,274	1,982	8,009	118,645	5,946	20,129	407,919
1894-95.....	4,712	14,122	350,069	2,180	8,559	118,247	6,892	22,681	468,446
1895-96.....	4,974	15,700	380,493	2,106	8,752	126,654	7,080	24,452	487,147
1896-97.....	5,109	16,809	409,433	2,109	9,574	107,633	7,209	26,383	517,066
1897-98.....	5,315	17,941	449,600	1,990	9,357	105,225	7,305	27,298	554,825
1898-99.....	5,495	18,718	473,227	1,957	9,410	103,838	7,452	28,128	580,065
1899-1900.....	6,005	20,372	519,251	1,978	10,117	110,797	7,983	30,489	630,048
1900-1901.....	6,318	21,778	541,730	1,892	9,775	108,221	8,210	31,553	649,951

In the last dozen years there has been a steady increase in the proportion of high-school students in certain leading secondary studies. In 1890 less than 34 per cent of the students were studying Latin, while in 1901 the per cent was about 50. The per cent studying algebra increased from nearly 43 in 1890 to nearly 56 in 1901. The following synopsis exhibits these percentages for each of the twelve years in certain studies:

Per cent of the total number of secondary students in public and private high schools and academies in certain courses and studies, etc.

Students and studies.	1889-1890.	1890-1891.	1891-1892.	1892-1893.	1893-1894.	1894-1895.	1895-1896.	1896-1897.	1897-1898.	1898-1899.	1899-1900.	1900-1901.
Males.....	45.03	43.67	44.01	43.62	43.39	43.00	43.40	43.84	43.50	42.93	43.16	42.83
Females.....	54.97	56.33	55.99	56.38	56.61	57.00	56.60	56.16	56.50	57.07	56.84	57.17
Preparing for college, classical course.....	10.61	8.45	9.18	9.90	10.34	10.00	10.05	8.94	7.99	7.87	8.32	8.30
Preparing for college, scientific courses.....	8.05	6.28	7.59	8.22	7.33	7.11	7.16	6.57	6.03	6.18	6.21	6.54
Total preparing for college.....	18.66	14.83	16.77	18.12	17.67	17.11	17.21	15.51	14.02	14.05	14.53	14.84
Graduates.....	10.05	10.51	10.87	11.46	11.88	11.60	11.73	11.95	11.75	11.78	11.74	11.95
Graduates prepared for college ^a.....	.....	35.74	39.15	36.62	30.92	32.44	32.63	32.00	30.60	31.61	32.95	33.48
Studying—												
Latin.....	33.62	39.80	38.80	41.94	43.59	43.76	46.22	48.01	49.44	50.29	49.97	49.93
Greek.....	4.32	4.65	4.68	4.82	4.99	4.73	4.58	4.60	4.59	4.27	5.55	5.53
French.....	9.41	9.06	8.59	9.94	10.31	9.77	10.13	9.98	10.48	10.68	10.43	10.75
German.....	11.43	15.68	11.61	13.00	12.78	12.68	13.20	13.76	14.24	14.91	15.06	16.09
Algebra.....	42.77	49.89	47.65	49.92	52.71	52.40	53.46	54.22	55.23	56.21	55.08	55.66
Geometry.....	20.07	23.04	22.52	24.36	25.25	24.51	25.71	26.24	26.59	27.36	26.75	27.26
Trigonometry.....	.....	.....	2.96	3.61	3.80	3.25	3.15	3.08	2.83	2.58	2.42	2.54
Physics.....	21.36	23.06	22.04	22.25	24.02	22.15	21.55	20.89	20.48	19.97	18.88	18.24
Chemistry.....	9.62	10.37	10.08	9.98	10.31	9.31	9.15	9.18	8.55	8.64	8.69	7.86
Physical geography.....	.....	.....	.....	.....	.....	22.44	24.93	24.64	24.33	23.75	22.88	22.42
Physiology.....	.....	.....	.....	.....	.....	28.03	31.08	29.98	29.38	28.62	26.96	26.27
Rhetoric.....	.....	.....	.....	.....	.....	31.31	32.27	33.78	33.30	36.70	37.70	39.69
English literature.....	.....	.....	.....	.....	.....	.....	.....	.....	38.90	40.60	41.19	43.90
History (other than U. S.).....	27.83	29.77	31.35	33.46	35.78	34.65	35.73	36.08	37.08	38.32	37.80	38.41

^a Per cent of total number of graduates.

A recent inquiry sent to the school superintendents in 160 of the largest cities, those having over 25,000 population, asking for the date of first opening of a public high school, brought 142 responses. Of the 142 cities reporting, it appears that 28 had public high schools before the end of the year 1850; in 41 cities such schools were established in the period from 1851 to 1860, inclusive; in 32 cities public high schools were established from 1861 to 1870, inclusive; and subsequent to 1870 such schools have been established in the 41 remaining cities.

Education in Porto Rico.—The report of the commissioner of education for Porto Rico to the Secretary of the Interior is naturally largely taken up with the public elementary schools of the island as reorganized since the American occupancy. The year 1901 found about 34,000 children in school, and the commissioner estimates that next year 50,000 will be enrolled. For these pupils the number of teachers will need to be increased to 1,000. The summer normal school at San Juan was attended by over 800 teachers in 1901. A large building for the normal school was under construction at Rio Piedras, and was to have been opened about November 21, 1901. There were 39 new school buildings completed and in use; the teaching corps has been reorganized; a system of agricultural schools gives practical instruction to about 1,000 students; and a high school is in operation at San Juan. The annual budget has been increased from \$400,000 to \$500,000, and the schools are now equipped with all necessary books and supplies, while the school term extends to nine months in the year. There are 100 American teachers now in the island. Free transportation for teachers between New York and San Juan was discontinued in June, 1901. The salary of American teachers is fixed at \$40 per month for nine months in cities of less than 5,000 population. In larger cities it is \$50 per month for the same time.

Teachers' institutes were held in 15 places in the island during the summer of 1900, and summer schools were open in 16 districts.

In January, 1901, the sum of \$200,000 was transmitted to the treasurer of Porto Rico from the United States Treasury, by direction of the President, to be used for school buildings, and suitable buildings are in course of construction in all parts of the island. The school maintenance fund of \$501,000 allotted under the civil government is 25 per cent of the entire insular budget. It is independent of \$235,000 destined for school extension.

The free public library in San Juan has 7,400 volumes. Provision has been made by the legislature of the island to send a limited number of young men and women to complete their education in the United States.

The following is a statistical summary of the public-school system of Porto Rico from October, 1900, to June, 1901, inclusive:

Total population of the island.....	953, 243
Total school population	323, 393
Number of schools open at end of year (boys, 132; girls, 71; mixed, 528; night, 2)	733
Average number of schools open each month	698
Number of buildings in use for schools (town, 120; rural, 387)	507
Number of teachers employed at end of year (white male, 461; white female, 235; colored male, 41; colored female, 31; total males, 502; total females, 266)	768
Total number of American teachers employed during year	104
Number of pupils enrolled at end of year	33, 802

(Of these 15,542 were white boys and 5,695 colored boys, and 8,763 were white girls and 3,803 colored girls. The total number of boys was 21,237, and of girls 12,565.)

Average daily attendance during the year	23, 453
Per cent of total population enrolled in schools.....	3.5
Estimated value of all school property.....	\$213, 465.97

Hawaii.—The Bureau is indebted to Mr. Alatau T. Atkinson, superintendent of public instruction of Hawaii, for the following figures and information relating to the schools of Hawaii:

For the year ending July 1, 1901, the enrollment was as follows: Enrolled in public and private schools, males 9,551, females 7,967, total 17,518; enrolled in public schools, males 7,233, females 5,956, total 13,189.

Average daily attendance in the public schools, 10,737.

Average number of days the public schools were kept, 186.

Number of buildings used as schoolhouses, 184.

Teachers' cottages supplied by the board of education, 64.

Estimated value of all public school property, \$500,000.

Number of pupils enrolled in public high schools or studying high school branches, 160.

Number of pupils enrolled in private and parochial schools giving primary or secondary instruction (including academies and preparatory schools), 4,329.

Whole number of different teachers employed in the public schools: Males, 104; females, 276; total, 380.

Average monthly salary of teachers (there is no distinction for sex, color, or race), \$62.

The appropriation for public schools from state taxes for two years ending June 30, 1903, was \$855,387.50.

Expenditure for the same for the year ending June 30, 1902, \$377,553.59.

There is no distinction on account of color or race in the public schools. American, British, German, Norwegian, Hawaiian, Hawaiian

mixed blood, Chinese, Japanese, Porto Rican, and South Sea Island children all attend the same schools.

From the last printed report of the superintendent for the year ending December 31, 1900, it appears that the number enrolled in the public schools was 11,501, showing an increase of enrollment in 1901 of 1,688.

The nationalities of the pupils are interesting. Thus there were, in 1900, 6,015 pupils of Hawaiian and Hawaiian mixed blood, 421 American, 136 British, 171 German, 2,625 Portuguese, 92 Scandinavian, 1,207 Japanese, 739 Chinese, 27 South Sea Islanders, and 68 of other unspecified nationalities in the public schools.

Cuba.—Volume II of the first annual report of the commissioner of public schools of Cuba has an especial value from an historical standpoint, on account of the reports of the provincial superintendents and investigating committees, which present a candid picture, in some respects quite curious, of the earliest workings of the school system which was inaugurated under the American administration. The commissioner remarks that "the school law is the most democratic order that has been published during the military occupation of the island of Cuba. It places the control of the public schools of the island almost entirely in the hands of the different local boards of education, only leaving to the higher offices the supervision of the work that is done by the lower, and such other authority and control as is rendered necessary by the facts that all expenditures of the public schools are paid from the island treasury, and that the grading and instruction throughout the island should be uniform." These boards are elected by the electors of the municipalities. They were supposed to appoint teachers without regard to politics or interest, but in some cases were found to be corrupt or negligent and the teachers were appointed from political motives or through favoritism. Such cases were investigated promptly and the offending members of the board removed, after a full examination of witnesses and report by a board of commissioners appointed for this purpose. These proceedings must have been an object lesson in administration to the voting public.

The progress during the year 1900-1901 is given in the following summary. At the beginning of this period there were a few more than 3,000 teachers employed in the public schools. The school accommodations were poor, as were also the equipment and supplies. The boards of education neglected their duties of supervision. The attendance was poor in many places, the methods of instruction were often defective, and many of the teachers had had but little experience. This state of things has been changed. Supervision and inspection have corrected many of the defects. Over 264,000 different children were enrolled in the schools during nine months, the enrollment for one month reaching nearly 180,000, of whom an average of 132,688 were in attendance daily. The population of the island being

about 1,500,000, an average of nearly one-eleventh of the population was in the public schools the entire school year, and one-sixth of the population attended school some portion of the year. By the census of 1899 the number of illiterate Cubans over 10 years was 690,565, out of a total population over 10 years of age of 1,215,810, or 57 per cent. This proportion can not long remain if one-sixth of the entire population is enrolled in school.

The number of schools has been increased by several hundreds, and the boards of education are becoming better acquainted with their duties, powers, and limitations, so that the school administration has improved greatly in the various districts. The schoolhouses and equipments have been greatly improved and supplies of text-books and other material have been abundant. All public school teachers hereafter will be required to possess a regular teacher's certificate. During the summer vacation summer normal schools were organized, which were attended by 4,000 teachers. One hundred teachers were sent to the summer normal school of Harvard University at Cambridge, Mass., and 60 young women are attending the State normal school at New Paltz, N. Y. A table is given of the number of private schools in the island, with their attendance and enrollment. From this it appears that there are in all 610 private schools, with an enrollment of 24,333 and an average attendance of 20,592. The commissioner remarks, however, that he believes these figures to be very incorrect.

Considerable space is given to manual training and to the "school city."

There were 2,413 different women and 1,708 different men employed during the year as teachers, of which numbers 1,911 women and 1,207 men, or 79 per cent of the women and 70 per cent of the men, taught the entire year.

The total enrollment was 264,742, or 47 per cent of the population of school age. The average monthly enrollment in the public schools was 168,303, and 24,333 in the private schools. The average daily attendance was 132,688, or 50 per cent of the total enrollment. This was made up of 86,456 whites and 46,232 colored, of whom 69,101 were boys and 63,587 were girls.

The expenditures for public schools for 1900-1901 were:

Boards of education.....	\$2,848,866.01
Office of commissioner of public schools	510,705.07
Office of the island superintendent of public schools.....	55,913.85
Office of the provincial superintendents of public schools	22,438.76
School buildings	125,808.11
Total	3,563,831.80

The following schedule, showing the annual expenditure for all grades of public instruction in Cuba, was received from the United States minister to Cuba:

Annual cost of public instruction.

Higher education:

Office of secretary	\$14, 440. 00
Habana University	274, 750. 00
High schools [institutes?], one for each province	228, 025. 86
School of painting and sculpture	11, 720. 00
School of arts and trades	25, 960. 00
National library	4, 500. 00
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	559, 395. 86
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Primary schools:

Boards of education, school-teachers, school rents, etc	2, 917, 742. 11
Furniture and school supplies, text-books, expenses of the students at New Paltz, expenses of the offices of school superintendents, construction and repair of schools, etc	419, 433. 56
Normal Kindergarten School	8, 840. 00
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	3, 346, 015. 67
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Grand total 3, 905, 411. 03

The department of public instruction is informed that there is an estimate, amounting to some \$260,000, which should be in the department of public works. The expense of freights and furniture for the schools is also not included, which is forwarded on bills of lading, nor is the expense of public journeys, for which transportation requests are issued, these expenses being paid directly by the General Treasury.

Higher education in Cuba.—The Bureau is indebted to the courtesy of the secretary of public instruction of Cuba for the annual report of the University of Habana for the scholastic year 1900-1901. From the historical introduction to this report it appears that the university was opened in 1734. The course of study then embraced grammar, arts, theology and the Holy Scriptures, mathematics, philosophy, civil and canon law, and medicine. This plan of studies was followed until 1842, when the "university," including the three grades of primary, secondary, and higher education, was secularized. The law of 1880 made the plan of studies and regulations of the university district uniform with those in Spain. The rector of the university was ex officio the head of education in Cuba. Various changes in the plan of studies in the different faculties from time to time were introduced by royal decrees, the dates whereof are recorded in the sketch under consideration. The present plan includes the faculties of letters and sciences, of medicine and pharmacy, and of law.

These faculties comprise "schools" with different titles, and the course or plan of studies is classified and distributed among these schools. An idea of the modernness of the programme may be derived from

the "schools" under the faculty of letters and sciences. This faculty includes the school of letters and philosophy, in which ancient and modern languages, history, psychology, moral philosophy, and sociology are taught; the school of pedagogy, the school of sciences (physical and biological, including anthropology) with laboratories and museums; the engineering school (including electrical engineering), the school of architecture, with laboratory and mechanical and electrical workshops, and the school of agronomy. The separate subjects of study, forming a list too long to give here, appear to be calculated to meet modern requirements. The photographs accompanying the report give views of the various laboratories with students at work in them. The great extension of laboratory work is an innovation which marks a radical change in the method of study, even of purely objective or laboratory subjects proper. In 1900-1901 there were 638 students in the university, of whom 158 were enrolled in the faculty of letters and sciences, 315 in the faculty of medicine and pharmacy, and 165 in the law faculty.

At the same time there were 126 students enumerated in the "institutes" of secondary instruction, of whom 61 were enrolled in the institute of Habana, 11 in that of the province of Pinar del Rio, 18 in that of Matanzas, 11 in that of Santa Clara, 5 in that of Puerto Principe, and 2 in the Institute of Santiago de Cuba.

All of which is respectfully submitted.

WM. T. HARRIS, *Commissioner*.

THE SECRETARY OF THE INTERIOR.

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- I.—STATISTICS OF STATE SCHOOL SYSTEMS.
II.—EXPENDITURE FOR WHITE AND COLORED SCHOOLS.
III.—PUBLICATIONS OF THE UNITED STATES BUREAU OF EDUCATION.

I.—STATISTICS OF STATE SCHOOL SYSTEMS.

TABLE 1.—*The total population, the school population, and the adult male population.*

State or Territory.	Estimated total popu- lation in 1901.	The school population.			Percent- age of boys.	Estimated number of male per- sons 21 years and over in 1901.
		Estimated number of children 5 to 18 years of age in 1901.				
		Boys.	Girls.	Total.		
1	2	3	4	5	6	7
United States	77,262,743	11,032,639	10,865,039	21,897,678	50.38	21,494,399
North Atlantic Division	21,443,488	2,621,566	2,619,335	5,240,901	50.02	6,382,937
South Atlantic Division	10,540,535	1,688,903	1,667,726	3,356,629	50.32	2,517,830
South Central Division	14,259,344	2,371,146	2,312,045	4,683,191	50.62	3,421,301
North Central Division	26,807,746	3,817,828	3,744,589	7,562,417	50.48	7,681,617
Western Division	4,211,630	533,796	521,344	1,055,140	50.59	1,490,707
North Atlantic Division:						
Maine	695,700	81,465	79,690	161,155	50.55	218,050
New Hampshire (1900)	411,588	44,302	44,504	88,806	49.89	130,987
Vermont	344,800	41,000	39,560	80,560	50.90	108,700
Massachusetts	2,855,060	315,690	318,820	634,510	49.75	858,800
Rhode Island	441,900	51,729	52,081	103,810	49.83	131,100
Connecticut	932,500	106,790	106,980	213,770	49.96	287,800
New York	7,410,000	883,000	889,570	1,772,570	49.81	2,227,000
New Jersey	1,394,000	240,490	242,950	483,380	49.74	570,500
Pennsylvania	6,417,000	857,190	845,180	1,702,340	50.35	1,850,000
South Atlantic Division:						
Delaware (1900)	184,735	24,877	24,105	48,982	50.79	54,018
Maryland	1,204,000	168,240	167,990	336,230	50.04	326,100
District of Columbia	284,100	29,721	32,005	61,726	48.15	85,430
Virginia (1899)	1,823,300	293,643	290,657	584,300	50.32	440,912
West Virginia (1900)	958,800	150,794	144,862	295,656	50.00	247,970
North Carolina	1,914,000	322,020	314,870	636,890	50.56	422,100
South Carolina	1,361,000	237,210	233,990	471,200	50.34	287,700
Georgia	2,256,000	377,260	375,260	752,520	50.13	509,700
Florida	544,600	84,538	83,987	168,525	50.16	143,900
South Central Division:						
Kentucky	2,178,000	341,445	332,824	674,269	50.64	551,900
Tennessee (1900)	2,020,616	328,849	317,619	646,468	50.87	487,380
Alabama (1900)	1,828,697	309,188	301,163	610,351	50.66	413,862
Mississippi (1899)	1,522,950	263,864	257,996	521,860	50.63	341,368
Louisiana	1,411,000	230,800	228,500	459,300	50.25	332,900
Texas	3,145,000	531,980	520,180	1,052,170	50.56	761,000
Arkansas	1,351,600	227,230	222,306	449,536	50.55	318,500
Oklahoma (1900)	398,331	63,773	61,015	124,788	51.11	109,191
Indian Territory	423,800	74,017	70,492	144,509	51.22	105,200
North Central Division:						
Ohio	4,198,000	560,640	549,610	1,110,250	50.50	1,224,000
Indiana	2,551,000	357,500	348,570	706,070	50.63	730,200
Illinois	4,985,000	684,330	680,050	1,364,380	50.16	1,449,000
Michigan	2,445,500	333,850	327,000	660,850	50.47	726,800
Wisconsin	2,103,000	313,870	310,040	623,910	50.31	580,000
Minnesota	1,804,000	267,680	262,280	529,960	50.51	522,000
Iowa	2,267,000	326,780	318,910	645,690	50.61	645,200
Missouri	3,153,000	469,176	459,789	928,965	50.51	869,500
North Dakota (1900)	139,145	48,831	46,766	95,597	51.08	93,217
South Dakota	419,100	66,261	63,484	129,745	51.07	117,600
Nebraska	1,083,000	165,560	161,390	326,950	50.64	305,700
Kansas	1,480,000	223,350	216,120	439,470	50.82	416,400
Western Division:						
Montana	261,000	29,520	28,720	58,240	50.69	109,600
Wyoming (1900)	92,531	11,570	10,530	22,100	52.35	37,898
Colorado	570,000	70,610	70,180	140,790	50.15	196,100
New Mexico	209,100	31,188	30,063	61,251	50.92	56,410
Arizona (1900)	122,931	16,296	15,542	31,778	51.09	44,081
Utah	284,800	46,384	46,392	92,776	50.00	69,120
Nevada	42,360	4,642	4,375	9,017	51.48	17,720
Idaho (1900)	161,772	23,656	22,653	46,309	51.08	53,932
Washington	543,000	69,763	67,557	137,320	50.80	206,000
Oregon (1900)	413,556	55,357	53,522	108,879	50.84	144,446
California	1,519,000	174,870	171,810	346,680	50.44	556,400

TABLE 2.—*Density of population, urban population, nativity and race classification, value of manufactures, illiteracy, and relations of the adult male and of the school population.*

[NOTE.—The statistics in this table, except those in column 12, are from the Census of 1900.]

State or Territory.	The total population.					Value of manufactured products per capita of population. ^b	The adult male population (21 years and over).				Number of children 5 to 18 years of age to every 100 persons of the total population.	
	Number of persons to a square mile.	Per cent in incor- porated places of 8,000 and over.	Per cent of native and foreign white and of colored.				Number to every 100 children 5 to 18 years of age.	Per cent of illit- erates (unable to write) among adult males.				
			Native white.	Foreign white.	Colored. ^a			Native white.	Foreign white.	Colored. ^a		
1	2	3	4	5	6	7	8	9	10	11	12	13
United States	25.6	32.5	74.4	13.4	12.2	\$74.43	98.3	4.9	11.5	46.8	31.3	28.3
North Atlantic Div.	129.8	57.0	75.6	22.5	1.9	140.19	121.8	2.0	15.2	16.7	23.3	24.4
South Atlantic Div.	38.9	17.0	62.2	2.9	35.8	35.55	75.2	11.5	11.3	51.0	33.0	31.8
South Central Div.	23.1	11.1	67.2	2.5	30.3	20.45	73.1	11.1	18.8	52.3	33.9	32.8
North Central Div.	34.9	30.6	82.1	15.8	2.1	68.68	101.6	2.9	7.9	27.4	32.4	28.2
Western Div.	3.5	31.2	75.1	18.6	5.3	63.97	141.1	2.4	7.7	36.1	25.6	25.1
North Atlantic Div.:												
Maine	23.2	23.7	85.3	13.4	.3	84.23	135.3	3.1	21.4	27.3	28.0	23.2
New Hampshire	45.7	38.6	78.4	21.4	.2	127.12	147.5	2.0	24.0	19.8	24.7	21.6
Vermont	37.6	11.2	86.7	13.0	.3	80.79	134.9	4.1	23.3	19.8	27.2	23.4
Massachusetts	348.9	67.0	68.8	29.9	1.3	171.77	155.4	.9	13.3	14.2	25.5	22.2
Rhode Island	407.0	63.1	66.6	31.2	2.2	204.60	126.3	2.0	18.2	15.6	25.7	23.5
Connecticut	187.5	52.0	72.1	26.1	1.5	184.04	134.6	1.0	15.6	13.8	25.9	22.9
New York	152.6	68.5	73.5	26.0	1.5	141.97	125.7	1.8	12.1	14.5	28.1	23.9
New Jersey	250.3	61.2	73.4	22.8	3.8	138.46	118.0	2.3	13.4	19.0	29.0	25.0
Pennsylvania	140.1	45.5	81.9	15.6	2.5	125.76	108.7	2.5	20.2	18.2	30.5	26.5
South Atlantic Div.:												
Delaware	94.2	41.4	75.9	7.5	16.6	161.42	110.3	7.1	17.6	42.6	31.8	26.5
Maryland	120.5	46.9	72.3	7.9	19.8	82.62	97.0	5.1	10.7	40.5	31.3	27.9
Dist. Columbia	4,645.3	100.0	61.7	7.0	31.3	161.53	138.4	.9	5.0	26.0	27.0	21.7
Virginia	46.2	14.7	63.3	1.0	35.7	31.33	76.4	12.2	10.5	52.5	32.4	31.6
West Virginia	38.9	7.7	93.1	2.4	4.5	33.20	83.9	10.7	22.5	37.7	34.1	30.8
North Carolina	39.0	5.1	66.5	.2	33.3	22.69	66.3	18.9	5.7	53.1	33.6	33.3
South Carolina	44.4	7.5	41.2	.4	58.4	18.44	61.1	12.3	5.2	54.7	33.1	34.6
Georgia	37.6	11.0	52.7	.6	46.7	21.55	67.7	11.8	5.6	56.3	34.4	33.4
Florida	9.7	15.0	52.6	3.7	43.7	40.06	85.4	8.3	9.2	39.4	34.0	30.9
South Central Div.:												
Kentucky	53.7	16.9	84.4	2.3	13.3	33.45	81.8	14.3	8.6	49.5	34.4	30.9
Tennessee	48.4	13.4	75.3	.9	23.8	21.80	75.4	14.1	7.7	47.6	34.1	32.0
Alabama	35.5	7.3	53.9	.8	45.3	20.03	67.8	13.8	8.0	59.5	34.4	33.3
Mississippi	33.5	2.6	40.8	.5	58.7	12.08	66.2	8.1	9.5	53.2	33.7	34.0
Louisiana	30.4	22.8	49.1	3.7	47.2	28.14	72.5	16.9	24.6	61.2	31.1	32.5
Texas	11.6	11.3	73.8	5.8	20.4	17.16	72.3	5.8	25.4	45.0	34.8	33.5
Arkansas	24.7	5.4	70.9	1.1	28.0	16.19	70.8	10.5	6.4	44.8	34.2	33.8
Oklahoma	10.3	5.0	88.4	3.9	7.7	6.61	87.5	2.7	6.3	44.4	-----	31.3
Indian Territory	12.6	0.0	76.0	1.2	22.8	4.25	72.8	10.7	16.8	35.9	-----	34.1
North Central Div.:												
Ohio	102.0	38.5	86.7	11.0	2.3	92.58	110.2	3.2	9.6	21.9	31.7	26.4
Indiana	70.1	24.2	92.1	5.6	2.3	64.84	103.5	4.4	9.6	27.7	33.7	27.7
Illinois	85.1	47.1	78.2	20.0	1.8	107.81	106.2	2.8	7.8	18.8	32.2	27.0
Michigan	42.2	30.9	76.8	22.3	.9	65.01	109.9	2.4	10.2	23.8	30.3	27.0
Wisconsin	38.0	20.7	74.6	24.9	.5	73.45	93.0	1.9	9.3	32.2	33.6	29.7
Minnesota	22.1	26.8	70.4	28.8	.8	50.95	98.5	1.0	6.4	35.4	32.4	29.4
Iowa	40.2	16.8	85.7	13.7	.6	28.43	99.9	1.6	5.2	23.3	33.1	28.5
Missouri	45.2	30.8	87.9	6.9	5.2	54.88	93.6	5.4	6.8	31.8	33.6	29.5
North Dakota	4.5	3.0	62.4	35.3	2.3	11.18	99.6	1.0	6.3	64.5	23.7	30.9
South Dakota	5.2	2.6	72.8	22.0	5.2	10.97	90.6	.8	4.9	51.6	23.7	29.9
Nebraska	13.9	15.8	82.5	16.6	.9	39.19	93.5	1.0	5.1	16.7	28.1	30.1
Kansas	18.0	14.0	87.7	8.6	3.7	28.99	94.8	1.7	6.4	28.7	29.8	29.7
Western Division:												
Montana	1.7	27.0	67.4	25.6	7.0	100.16	138.2	.8	6.7	39.7	10.2	22.3
Wyoming	.9	24.1	78.3	17.9	3.8	25.11	171.5	.8	7.8	36.4	9.4	23.9
Colorado	5.2	38.1	81.3	16.7	2.0	66.60	139.3	2.4	7.1	20.6	22.5	24.7
Mew Mexico	1.6	0.0	85.5	6.8	7.7	13.78	92.1	23.6	30.9	72.3	31.9	30.6
Arizona	1.1	0.0	57.4	18.2	24.4	104.54	133.7	4.5	30.9	62.8	16.8	25.8
Utah	3.4	25.2	79.4	19.1	1.5	30.00	74.5	1.2	4.6	43.3	35.0	32.6
Nevada	.4	0.0	63.3	20.3	16.4	19.31	136.5	.8	7.0	58.7	12.6	21.3
Idaho	1.9	0.0	82.0	13.5	4.5	12.15	116.4	1.1	5.7	49.1	11.3	28.6
Washington	7.7	31.9	76.1	19.7	4.2	72.76	149.3	.5	3.9	31.0	27.0	25.3
Oregon	4.4	23.9	82.4	13.0	4.6	48.12	132.7	1.1	3.4	36.5	32.3	26.3
California	9.5	43.7	73.2	21.3	5.5	77.27	160.5	1.1	8.1	28.1	24.5	22.8

^a Including Mongolians and Indians.^b Less cost of raw material.

TABLE 3.—*School ages in the several States—State school censuses.*

State or Territory.	Age for free attendance at the public schools.	Age for compulsory attendance.	School census.				
			Date of latest school census reported.	Age of children enumerated.	Number of children enumerated.		
					Boys.	Girls.	Total.
1	2	3	4	5	6	7	8
North Atlantic Division:							
Maine	5-21	a 7-14	1901	4-21			211,864
New Hampshire (1900)	Over 5.	8-14	1900	5-16	36,017	35,527	71,544
Vermont	5-18	8-14	1901	5-18	40,381	39,135	79,516
Massachusetts	No limit.	7-14	1901	5-15	233,953	240,270	474,223
Rhode Island	(b)	7-15	1901	a 5-15	42,514	42,570	85,084
Connecticut	No limit.	8-16	1900	4-16			199,026
New York	5-21	8-16	1901	5-18	812,255	808,022	1,620,287
New Jersey	4-20	7-12	(c)				
Pennsylvania	6-21	d 8-16	1901	6-21	686,996	673,870	1,360,866
South Atlantic Division:							
Delaware (1893)	6-21	(e)	1893	6-21	15,827	17,753	33,585
Maryland	6-21	f 8-16	(g)				
District of Columbia	6-17	8-14	(g)				
Virginia (1899)	5-21	(e)	1895	5-21	329,725	326,140	655,865
West Virginia (1900)	6-21	8-14	1900	6-21	159,375	148,209	307,584
North Carolina	6-21	(e)	1901	6-21	341,221	326,760	h 669,833
South Carolina	6-21	(e)	(g)				
Georgia		(e)	1898	6-18	323,039	327,831	650,870
Florida	6-21	(e)	1900	6-21	81,712	79,716	161,428
South Central Division:							
Kentucky	6-20	7-14	1901	6-20	370,684	359,118	729,802
Tennessee (1900)	6-21	(e)	1900	6-21	391,322	377,521	768,843
Alabama (1900)	7-21	(e)	1899	7-21	290,000	345,000	635,000
Mississippi (1897)	5-21	(e)	1896	5-21	270,789	281,678	552,467
Louisiana	6-18	(e)	1899	6-18	209,154	195,603	404,757
Texas	8-17	(e)	1901	8-17	372,061	257,304	729,365
Arkansas	6-21	(e)	1901	6-21	250,938	240,898	491,746
Oklahoma							
Indian Territory			1901	a 5-20	79,915	76,561	156,416
North Central Division:							
Ohio	6-21	8-14	1901	6-21	624,300	595,619	1,219,919
Indiana	6-21	7-14	1901	6-21	391,911	365,773	757,684
Illinois	6-21	7-14	1901	6-21	808,330	787,515	1,595,845
Michigan	5-20	8-15	1901	5-20	367,846	362,255	730,101
Wisconsin	4-20	7-14	1901	4-20	375,622	367,905	743,527
Minnesota	5-21	8-13	(g)				
Iowa	5-21	(e)	1901	5-21	373,252	361,897	735,159
Missouri	6-20	(e)	1901	6-20	501,575	484,999	986,574
North Dakota (1900)	6-20	8-14	1900	6-20	47,846	44,163	92,009
South Dakota	6-21	8-14	1901	6-21	65,763	62,490	128,253
Nebraska	5-21	7-14	1901	5-21	191,631	185,438	377,069
Kansas	5-21	8-14	1901	5-21	257,799	250,212	508,011
Western Division:							
Montana	6-21	8-14	1901	6-21	31,129	30,607	61,736
Wyoming (1900)	6-21	7-16	(g)				
Colorado	6-21	8-14	1901	6-21	81,936	80,842	162,778
New Mexico	5-21	8-16	1901	5-21	33,549	29,315	62,864
Arizona (1900)			1900	6-18	10,655	10,178	20,833
Utah	6-18	8-14	1901	6-18	43,714	43,475	87,189
Nevada	6-18	8-14	1901	6-18	4,688	4,442	9,130
Idaho (1900)	5-21	8-14	1900	5-21	28,234	26,605	54,839
Washington	6-21	8-15	1901	5-21	77,277	75,264	152,541
Oregon	4-20	8-14	1900	4-20	67,490	65,691	133,181
California	i 6-21	8-14	1901	5-17	189,055	183,830	372,885

a Inclusive.

b Not fixed by State law.

c School census law repealed; funds now apportioned on basis of total days' attendance.

d With certain exceptions in the case of children over 13.

e No compulsory attendance law.

f Law of 1902; applies only to Baltimore city and Allegany County. Children 12 to 16 years lawfully employed and able to read are exempt.

g No State school census.

h Including 1,852 Croaton Indians.

i May be extended.

TABLE 4.—*Number of pupils enrolled in the common schools at different dates, and the relation of the enrollment to the school population.*

State or Territory.	Number of different pupils of all ages enrolled during the school year (excluding duplicate enrollments).					Per cent of school population (i. e., of children 5 to 18 years of age) enrolled.				
	1870-71.	1879-80.	1889-90.	1899-1900.	1900-01.	1870-71.	1879-80.	1889-90.	1899-1900.	1900-1901.
1	2	3	4	5	6	7	8	9	10	11
United States.....	7,561,582	9,867,505	12,722,581	15,465,010	15,603,451	61.45	65.50	68.61	72.25	71.26
N. Atlantic Division.....	2,743,344	2,930,345	3,112,622	3,643,949	3,697,221	77.95	75.17	70.45	70.86	70.55
S. Atlantic Division.....	603,619	1,242,811	1,785,486	2,170,845	2,210,217	30.51	50.74	59.22	65.28	66.14
S. Central Division.....	767,839	1,371,975	2,293,579	2,902,279	3,022,905	34.17	46.43	60.14	66.70	64.55
N. Central Division.....	3,300,660	4,033,828	5,015,217	5,842,569	5,830,362	76.87	74.84	76.46	78.65	77.10
Western Division.....	146,120	288,546	515,677	815,338	833,446	54.77	64.96	70.01	79.51	78.99
N. Atlantic Division:										
Maine.....	a 152,600	149,827	130,676	130,918	132,862	a 87.35	89.80	85.88	81.38	82.43
New Hampshire.....	71,957	64,341	59,813	65,688	b 65,688	91.31	81.32	71.28	73.97	73.97
Vermont.....	c 65,384	75,238	c 65,608	65,964	65,465	.....	87.21	.....	82.15	81.26
Massachusetts.....	273,661	306,777	371,432	474,891	468,188	72.34	71.76	72.56	73.71	73.77
Rhode Island.....	a 34,000	40,604	52,774	67,231	69,067	a 59.24	59.59	62.65	66.79	66.54
Connecticut.....	113,588	119,694	126,505	155,228	153,579	80.83	76.97	72.02	74.54	72.78
New York.....	1,028,110	1,031,593	1,042,160	1,200,574	1,242,416	82.98	77.19	70.71	69.57	70.10
New Jersey.....	169,430	204,961	234,072	322,575	336,432	63.20	64.77	62.21	68.52	69.60
Pennsylvania.....	834,614	937,310	1,020,522	1,151,880	1,161,524	76.35	74.37	69.53	68.90	68.22
S. Atlantic Division:										
Delaware.....	20,058	27,823	31,434	36,895	b 36,895	50.04	65.20	66.15	75.23	75.32
Maryland.....	115,683	162,431	184,251	222,373	224,004	46.70	58.13	60.37	67.00	66.62
District of Columbia.....	15,157	26,439	33,906	46,519	47,431	41.60	55.40	63.10	76.81	76.84
Virginia.....	131,088	220,736	342,239	d 358,825	c 358,825	82.34	45.00	60.51	57.31	61.41
West Virginia.....	76,999	142,850	193,064	232,343	b 232,343	49.47	69.21	75.27	78.58	78.59
North Carolina.....	a 115,000	252,612	322,533	400,452	431,353	a 59.23	55.87	56.39	63.55	67.73
South Carolina.....	66,056	134,072	201,260	281,891	285,206	27.28	40.56	47.08	60.74	60.52
Georgia.....	49,578	236,533	381,297	482,673	511,743	11.89	46.24	58.15	65.20	65.37
Florida.....	14,000	39,315	92,472	108,874	111,607	21.21	44.16	71.40	68.57	66.22
S. Central Division:										
Kentucky.....	c 178,457	c 276,000	399,660	500,294	497,859	.....	.....	65.64	75.27	73.82
Tennessee.....	a 140,000	300,217	447,950	485,354	b 485,354	a 32.00	58.21	74.05	75.09	75.08
Alabama.....	141,312	179,490	301,615	376,423	b 376,423	40.36	42.60	55.83	61.67	61.67
Mississippi.....	117,000	236,654	334,158	d 360,177	d 360,177	40.36	61.29	70.62	64.45	69.03
Louisiana.....	57,639	77,642	120,253	196,169	198,896	24.78	25.87	31.58	43.62	43.31
Texas.....	63,504	a 230,000	466,872	659,598	659,598	20.00	42.40	59.60	64.67	64.67
Arkansas.....	69,927	81,972	223,071	314,662	323,859	40.29	30.81	55.41	71.02	72.04
Oklahoma.....	.....	.....	.....	99,602	b 99,602	.....	.....	.....	79.82	79.82
Indian Territory.....	.....	.....	.....	.....	b 21,137	.....	.....	.....	.....	14.63
N. Central Division:										
Ohio.....	719,372	729,499	797,439	829,160	829,857	84.04	76.69	76.54	75.40	74.75
Indiana.....	450,057	511,233	512,955	564,807	569,731	78.64	82.39	79.21	81.10	78.87
Illinois.....	672,737	704,041	778,319	953,911	969,634	81.01	74.61	71.97	72.68	70.63
Michigan.....	292,466	362,556	427,032	504,985	510,031	79.66	78.08	73.45	77.13	77.11
Wisconsin.....	205,285	239,457	351,723	445,142	446,247	73.92	73.78	63.77	72.51	71.52
Minnesota.....	113,883	130,248	280,960	399,207	459,041	75.92	75.87	74.59	77.59	76.03
Iowa.....	341,928	426,057	493,267	566,223	562,662	84.44	83.52	85.51	89.06	87.14
Missouri.....	350,070	432,986	620,314	719,817	711,720	55.03	63.85	74.43	78.63	76.61
North Dakota.....	a 1,600	13,718	55,543	77,686	b 77,686	a 39.26	41.68	71.26	81.26	81.26
South Dakota.....	.....	.....	78,043	98,822	100,590	.....	.....	81.04	79.49	77.53
Nebraska.....	23,265	92,549	240,300	288,227	285,415	58.79	68.48	75.35	89.50	87.30
Kansas.....	89,777	231,434	359,322	389,582	382,748	74.22	73.23	88.56	89.21	87.08
Western Division:										
Montana.....	a 1,650	4,270	16,980	39,430	a 42,400	70.24	63.77	71.14	72.80	72.80
Wyoming.....	a 450	2,507	7,052	14,512	b 14,512	a 45.34	77.44	54.46	65.66	65.67
Colorado.....	4,337	22,113	65,490	117,553	120,110	42.28	60.82	72.30	88.19	85.31
New Mexico.....	a 1,320	4,735	18,215	36,735	53,227	a 4.42	13.32	42.25	61.43	57.50
Arizona.....	0	4,212	7,989	16,504	b 16,504	0.00	50.16	52.72	51.94	51.94
Utah.....	16,992	24,329	37,279	73,042	76,331	53.36	50.61	55.25	81.02	82.51
Nevada.....	3,106	9,045	7,387	6,676	6,688	53.97	79.73	73.80	74.06	74.18
Idaho.....	906	5,834	14,311	36,069	b 36,069	45.06	77.85	62.66	75.18	79.18
Washington.....	a 5,000	14,780	55,964	115,104	123,391	a 69.00	72.30	70.58	87.86	89.85
Oregon.....	21,000	37,533	63,254	89,405	89,405	67.73	75.02	74.78	82.13	82.11
California.....	91,332	158,765	221,756	269,736	272,009	63.63	73.37	77.38	79.56	78.47

a Approximate.

c Includes pupils of legal school age only.

e Highest number enrolled.

b In 1899-1900.

d In 1898-99.

TABLE 5.—The school enrollment of 1900-1901 classified by sex—Percentage of the total population enrolled at different dates.

State or Territory.	Number of different pupils of all ages enrolled.			Per cent of the total population enrolled.				
	Boys.	Girls.	Total.	1870-71.	1879-80.	1889-90.	1899-1900.	1900-1901.
1	2	3	4	5	6	7	8	9
United States.....	a 7,841,570	a 7,761,881	15,603,451	19.14	19.67	20.32	20.46	20.20
North Atlantic Division	a 1,860,072	a 1,837,149	3,697,221	21.95	20.20	17.89	17.31	17.24
South Atlantic Division	a 1,103,988	a 1,115,529	2,219,517	10.05	16.36	20.16	20.79	21.06
South Central Division	a 1,503,291	a 1,519,614	3,022,905	11.56	15.38	20.90	21.86	21.20
North Central Division	a 2,951,912	a 2,878,450	5,830,362	24.80	23.23	22.43	22.19	21.75
Western Division	a 422,307	a 411,139	833,446	13.99	16.32	17.03	19.92	19.79
North Atlantic Division:								
Maine.....			132,862	24.25	23.09	21.13	18.85	19.10
New Hampshire.....	b 33,429	b 32,268	b 65,688	22.41	18.54	15.89	15.96	15.96
Vermont.....	33,234	32,181	65,465	c 19.77	22.64	c 19.74	19.20	18.99
Massachusetts.....			468,188	18.31	17.20	16.59	16.93	16.39
Rhode Island.....	34,628	34,439	69,067	15.11	14.69	15.27	15.69	15.63
Connecticut.....			155,579	20.83	19.22	16.95	17.09	16.68
New York.....	636,620	615,796	1,242,416	23.18	20.30	17.37	16.64	16.77
New Jersey.....	168,401	168,001	336,432	18.26	18.12	16.20	17.12	17.40
Pennsylvania.....	583,046	578,478	1,161,524	23.24	21.89	19.41	18.28	18.10
South Atlantic Division:								
Delaware.....			b 36,895	15.79	18.98	18.66	19.98	b 19.98
Maryland.....			224,004	14.55	17.37	17.68	18.72	18.61
District of Columbia	22,112	25,319	47,431	11.23	14.88	16.02	16.69	16.70
Virginia.....	d 179,199	d 179,626	d 358,825	10.47	14.59	20.67	d 19.58	d 19.58
West Virginia.....	b 120,436	b 111,907	b 232,343	16.85	23.10	25.31	24.23	b 24.23
North Carolina.....	219,275	212,083	431,358	10.45	18.05	19.93	21.22	22.54
South Carolina.....	136,597	148,609	285,206	9.05	13.46	17.49	21.03	20.96
Georgia.....	241,601	250,247	491,848	4.08	15.34	20.75	21.78	21.81
Florida.....	54,987	56,620	111,607	7.19	14.59	23.63	20.60	20.49
South Central Division:								
Kentucky.....	251,556	246,303	497,859	13.21	16.74	21.50	23.30	22.86
Tennessee.....	b 247,317	b 238,037	b 485,354	10.60	19.46	25.34	24.02	b 24.02
Alabama.....	b 171,000	b 235,423	b 376,423	13.85	14.22	19.93	20.59	b 20.59
Mississippi.....			d 390,177	13.70	20.91	25.92	d 23.65	d 23.65
Louisiana.....	96,958	101,938	198,896	7.73	8.26	10.75	14.20	14.10
Texas.....	b 333,581	b 326,007	b 659,588	7.26	13.82	20.88	21.64	b 21.64
Arkansas.....	161,929	161,930	323,859	13.72	10.21	19.77	23.99	24.33
Oklahoma.....	b 51,380	b 48,222	b 99,602				25.01	b 25.01
Indian Territory.....			21,137					4.99
North Central Division:								
Ohio.....	423,698	406,159	829,857	26.50	22.81	21.72	19.94	19.76
Indiana.....	283,323	273,408	556,731	26.34	25.85	23.40	22.44	21.82
Illinois.....	485,350	478,284	963,634	25.69	22.88	20.34	19.89	19.33
Michigan.....	255,736	254,295	510,031	23.98	22.15	20.30	20.86	20.86
Wisconsin.....	225,350	220,897	446,247	24.60	22.76	20.85	21.51	21.22
Minnesota.....			403,041	24.47	23.09	21.58	22.79	22.34
Iowa.....			562,662	28.19	26.23	25.80	25.37	24.82
Missouri.....	357,210	354,510	711,720	18.74	22.27	23.15	23.17	22.57
North Dakota.....	40,435	37,191	b 77,686	9.34	10.15	19.45	24.34	b 24.34
South Dakota.....	52,212	48,378	100,590			23.74	24.60	24.00
Nebraska.....	145,655	139,760	285,415	16.61	20.46	22.69	27.03	26.35
Kansas.....	194,147	188,601	382,748	22.28	23.23	27.98	26.49	25.86
Western Division:								
Montana.....			e 42,400	7.54	10.90	12.85	16.20	e 16.21
Wyoming.....	b 7,359	b 7,153	b 14,512	4.55	13.93	11.62	15.68	b 15.68
Colorado.....	59,406	60,704	120,110	9.33	11.38	15.89	21.78	21.07
New Mexico.....	19,544	15,683	35,227	1.40	3.98	11.86	18.81	17.61
Arizona.....			b 16,504	0.00	10.42	13.40	13.42	b 13.42
Utah.....	38,369	38,162	76,531	18.61	16.90	17.93	26.39	26.88
Nevada.....	3,370	3,318	6,688	7.04	14.53	16.14	15.77	15.79
Idaho.....	b 18,156	b 18,513	b 36,669	5.59	17.89	16.96	22.67	b 22.67
Washington.....	62,965	60,432	123,391	18.62	19.68	16.02	22.22	22.72
Oregon.....	b 45,315	b 44,090	b 89,405	21.63	21.47	20.16	21.62	b 21.62
California.....	138,020	133,989	272,009	15.61	18.36	18.36	18.16	17.91

a Estimated in part.

b In 1899-1900.

c Includes pupils of legal school age only.

d In 1898-99.

e Approximate

DIAGRAM 1.—Number of pupils enrolled in the common schools of the United States each year since 1870-71.

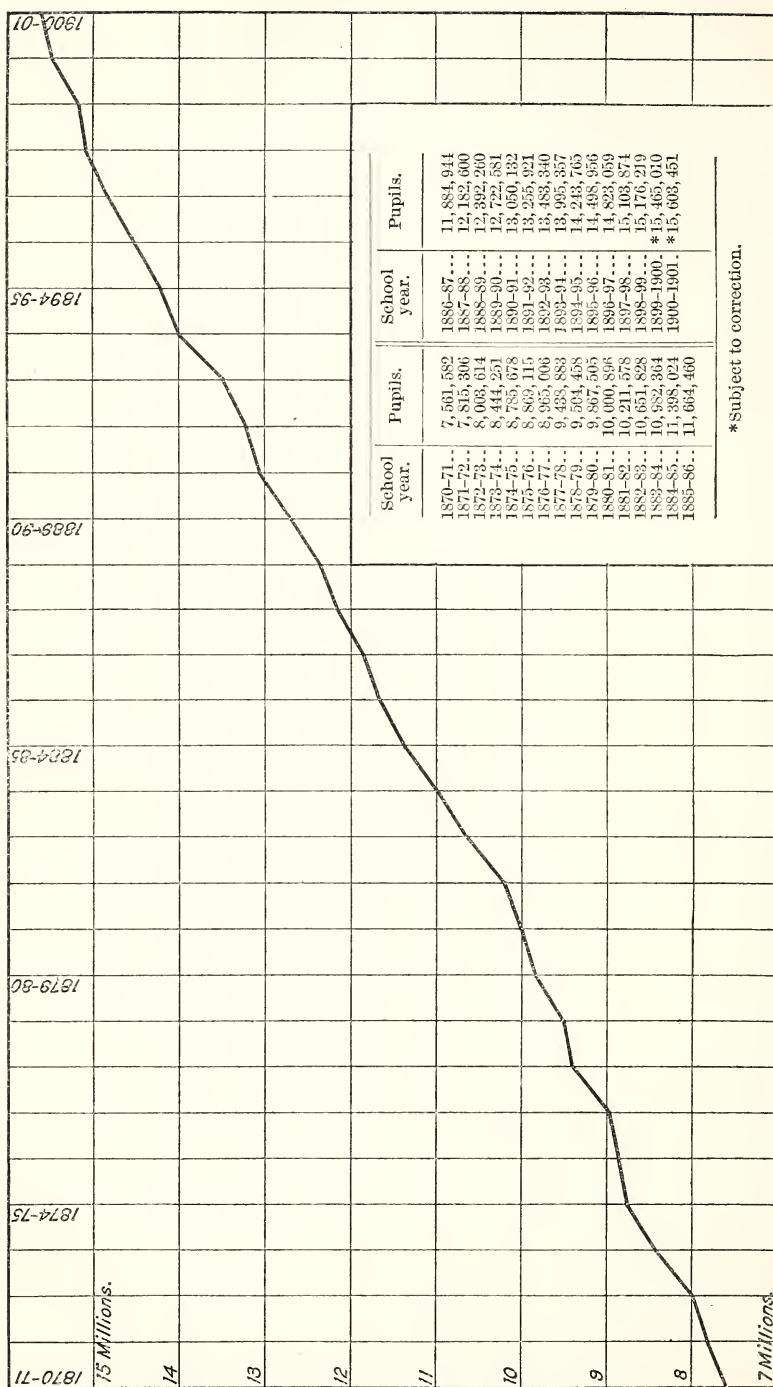


DIAGRAM 2.—Per cent of the population enrolled in the common schools each year since 1870-71.

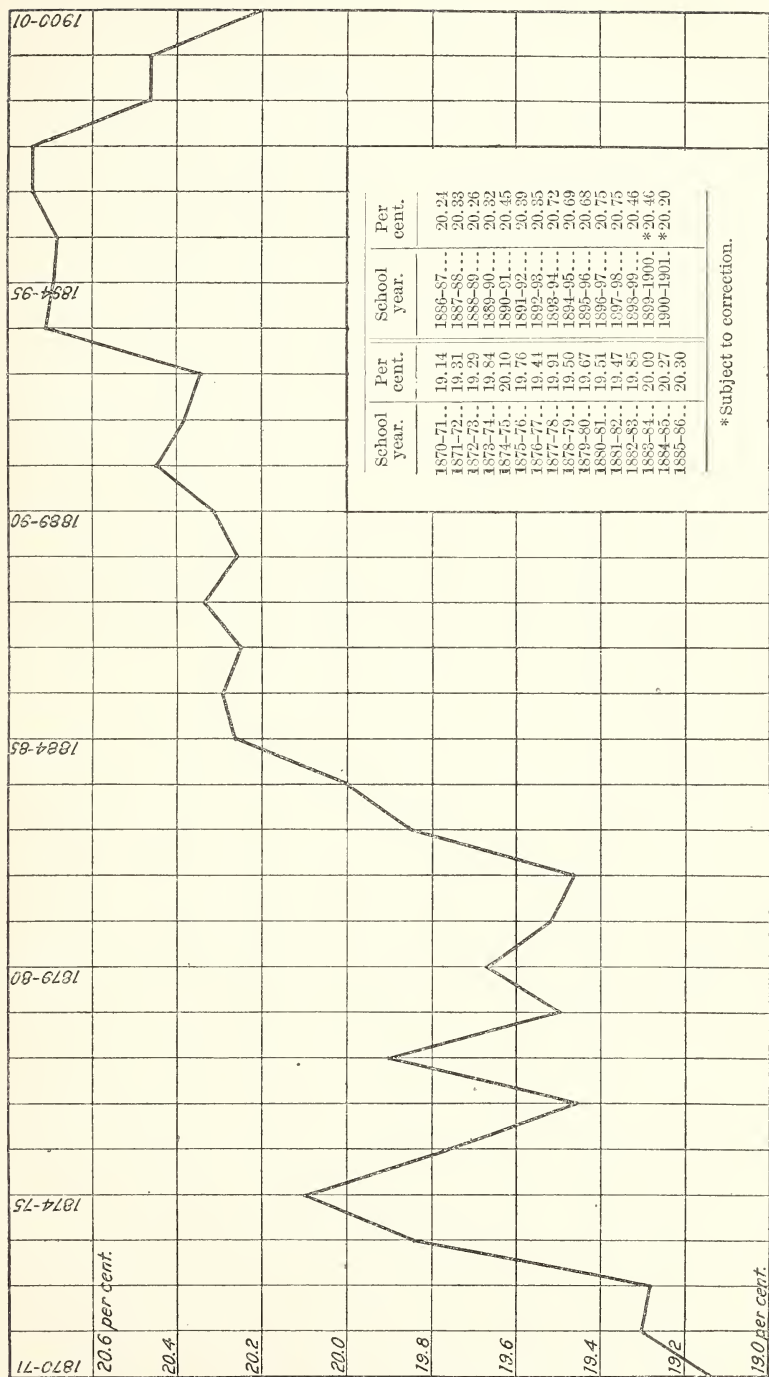


TABLE 6.—*Per cent of the school population (i. e., children 5 to 18 years of age) enrolled in the public schools, for a period of years.*

Year.	United States.	North Atlantic Division.	South Atlantic Division.	South Central Division.	North Central Division.	Western Division.
1870-71	61.45	77.95	30.51	34.17	76.87	54.77
1871-72	62.20	77.33	32.27	37.94	77.04	54.43
1872-73	62.36	76.79	35.86	38.67	75.97	57.52
1873-74	64.40	77.77	42.10	40.82	76.98	61.04
1874-75	65.54	78.59	44.61	42.47	77.54	61.39
1875-76	64.70	78.55	46.72	37.36	77.05	66.37
1876-77	63.92	76.83	47.02	38.51	75.60	63.12
1877-78	65.75	77.09	48.85	43.50	77.98	66.26
1878-79	64.64	76.18	46.72	44.71	75.28	65.63
1879-80	65.50	75.17	50.74	46.43	75.84	64.96
1880-81	65.03	74.28	51.49	47.03	74.59	64.82
1881-82	65.03	74.56	51.90	47.02	74.15	65.93
1882-83	66.39	74.15	54.30	50.68	75.13	67.05
1883-84	66.96	72.83	56.25	53.59	75.06	68.01
1884-85	67.96	73.23	57.17	56.57	75.46	68.53
1885-86	68.14	72.63	57.68	56.82	76.08	68.03
1886-87	67.98	72.23	58.98	56.21	75.77	67.97
1887-88	68.23	71.60	58.68	58.67	75.96	68.53
1888-89	68.20	70.60	58.40	58.28	76.63	69.39
1889-90	68.61	70.45	59.22	60.14	76.46	70.01
1890-91	69.40	70.04	60.15	63.01	76.25	75.49
1891-92	69.51	69.78	59.50	63.72	76.20	77.98
1892-93	69.70	68.99	61.94	63.92	76.23	77.16
1893-94	71.32	70.45	63.08	66.00	78.04	77.45
1894-95	71.54	71.53	62.21	65.83	78.17	79.32
1895-96	71.80	71.57	62.46	66.75	78.16	79.72
1896-97	72.36	72.12	64.49	67.75	78.06	78.27
1897-98	72.68	71.78	66.25	67.36	78.66	78.00
1898-99	71.96	71.69	64.93	66.54	77.75	77.85
1899-1900 ^a	72.25	70.86	65.38	66.70	78.65	79.51
1900-1901 ^a	71.26	70.55	66.14	64.55	77.10	78.99

^a Subject to correction.

TABLE 7.—*The average daily attendance at various periods, and its relation in 1900-1901 to the enrollment.*

State or Territory.	Average number of pupils actually present at school each day.					Number attending daily for each 100 enrolled in 1900-1901.
	1870-71.	1879-80.	1889-90.	1899-1900.	1900-1901.	
1	2	3	4	5	6	7
United States	4,545,917	6,144,143	8,153,635	10,596,511	10,692,091	68.52
North Atlantic Division	1,627,208	1,824,487	2,036,459	2,636,892	2,669,503	72.20
North Atlantic Division	368,111	776,798	1,126,693	1,351,006	1,388,788	63.02
South Central Division	535,652	902,767	1,467,649	1,962,524	2,008,060	66.45
North Central Division	1,911,720	2,451,167	3,188,732	4,080,450	4,046,812	69.41
Western Division	102,646	188,824	394,112	556,629	568,828	63.26
North Atlantic Division:						
Maine	100,392	103,115	98,864	97,697	97,038	73.05
New Hampshire	48,150	48,993	41,526	47,276	47,276	<i>b</i> 71.97
Vermont	<i>a</i> 44,100	48,606	45,887	47,020	47,964	73.26
Massachusetts	201,700	233,127	273,910	366,136	371,048	79.27
Rhode Island	22,485	27,217	33,905	47,124	49,038	70.99
Connecticut	62,683	73,546	83,656	111,564	115,264	74.10
New York	493,648	573,089	642,984	857,488	879,157	70.27
New Jersey	86,812	115,194	133,286	207,947	221,273	65.77
Pennsylvania	567,188	601,627	682,941	854,640	847,445	72.96
South Atlantic Division:						
Delaware	<i>a</i> 12,700	17,489	19,649	<i>a</i> 25,300	<i>ab</i> 25,300	<i>cb</i> 68.57
Maryland	56,435	85,778	102,351	134,400	135,515	60.51
District of Columbia	10,261	20,637	28,184	35,463	36,672	77.32
Virginia	77,402	128,404	198,290	<i>c</i> 203,136	<i>c</i> 203,136	<i>c</i> 56.72
West Virginia	51,536	91,604	121,700	151,254	<i>b</i> 151,254	<i>b</i> 65.10
North Carolina	<i>a</i> 73,000	170,100	203,100	206,918	253,019	58.66
South Carolina	44,700	<i>a</i> 90,600	147,739	201,205	208,114	72.98
Georgia	31,577	145,190	240,791	288,237	310,453	63.31
Florida	<i>a</i> 10,900	27,046	64,819	75,003	75,325	67.48
South Central Division:						
Kentucky	120,866	178,000	225,739	310,339	312,354	62.73
Tennessee	<i>b</i> 89,000	208,528	323,548	338,566	<i>b</i> 338,566	<i>b</i> 69.76
Alabama	107,665	117,978	182,467	297,805	<i>b</i> 297,805	<i>b</i> 79.10
Mississippi	<i>a</i> 90,000	156,761	207,704	<i>c</i> 201,593	<i>c</i> 201,593	<i>c</i> 55.98
Louisiana	<i>a</i> 40,500	<i>a</i> 54,800	87,536	146,323	140,242	70.50
Texas	41,000	<i>a</i> 132,000	291,941	438,779	<i>b</i> 438,779	<i>b</i> 66.53
Arkansas	<i>a</i> 46,600	<i>a</i> 54,700	<i>a</i> 148,714	195,401	202,837	62.65
Oklahoma				63,718	<i>b</i> 63,718	<i>b</i> 63.96
Indian Territory					12,166	57.56
North Central Division:						
Ohio	432,452	476,279	549,209	616,965	610,622	73.57
Indiana	295,671	321,659	342,275	429,596	420,276	75.47
Illinois	341,686	431,638	538,310	737,576	756,553	78.51
Michigan	<i>a</i> 193,000	<i>a</i> 240,000	<i>a</i> 282,000	355,226	<i>a</i> 558,600	<i>a</i> 70.31
Wisconsin	<i>a</i> 132,000	<i>a</i> 156,000	200,457	<i>a</i> 309,800	278,803	62.43
Minnesota	50,694	<i>a</i> 78,400	127,025	243,224	239,462	59.42
Iowa	211,562	259,836	306,309	373,474	373,547	66.40
Missouri	187,024	<i>a</i> 281,000	384,627	490,012	458,986	64.49
North Dakota	} <i>a</i> 1,040	8,530	20,694	43,560	<i>b</i> 43,560	<i>b</i> 56.07
South Dakota			48,327	<i>a</i> 68,600	64,770	64.39
Nebraska	<i>a</i> 14,300	60,156	146,139	181,874	182,589	63.97
Kansas	52,891	137,669	243,300	261,783	259,039	67.69
Western Division:						
Montana	<i>a</i> 1,100	<i>a</i> 3,000	10,596	<i>a</i> 26,300	<i>a</i> 25,900	<i>a</i> 61.08
Wyoming	<i>b</i> 250	1,920	<i>a</i> 4,700	<i>a</i> 26,600	<i>a</i> <i>b</i> 69,650	<i>a</i> <i>b</i> 69.50
Colorado	2,611	12,618	38,715	73,221	74,735	62.22
New Mexico	<i>a</i> 800	3,150	<i>a</i> 13,000	22,433	23,412	66.45
Arizona	0	2,847	4,702	10,177	<i>b</i> 10,177	<i>b</i> 61.66
Utah	12,819	17,178	20,867	50,555	53,560	69.98
Nevada	<i>a</i> 1,800	5,401	5,064	4,698	4,698	73.74
Idaho	<i>b</i> 600	3,863	<i>a</i> 9,500	21,962	<i>b</i> 21,962	<i>b</i> 59.88
Washington	<i>a</i> 3,300	10,546	36,946	74,717	81,400	65.96
Oregon	<i>a</i> 15,000	27,435	43,333	64,411	<i>b</i> 64,411	<i>b</i> 72.06
California	64,286	100,963	146,589	197,395	198,789	73.08

a Approximately.*b* In 1899-1900.*c* In 1898-99.

Method of ascertaining average attendance.—The average daily attendance during a year (which is the average number of pupils actually present each day the schools were in session) may be computed as follows:

First, for a single school: Add together the number of pupils present each school day during the year, and divide the sum (which is the "aggregate attendance in days") by the number of such school days.

Second, for a group of schools having the same number of school days in the year (as the schools of most cities have): Divide the combined aggregate attendance in days of all the schools by the number of school days in the year.

Third, for a system of schools having different lengths of school year (as, for instance, those of a county): Add together the average attendance of the component schools and groups of the system, as ascertained by the foregoing rule. For larger systems, as those of a State or of the United States, the summing-up process is continued in the same way.

In a system of schools such as is specified under the heading "Third," the average number of days in the school year for the whole system is found by dividing the combined aggregate attendance in days of all the schools of the system by the average attendance as ascertained by the method given. See observations on Table 8.

Observations on ascertaining the average school term (Table 8).—The "aggregate number of days' schooling given" to all pupils (see column 7), which is the same thing as the aggregate number of days attended by all the pupils, has been computed for those States which do not make an explicit report of this item by multiplying the average daily attendance of pupils by the average length of school term in days.

Conversely, the average length of school term (column 6) for the United States as a whole and for each of its geographical divisions has been obtained by dividing the aggregate number of days attended by the average daily attendance.

By this method the school term of each State, in computing the average term for a number of States, is in fact given a weight proportioned to the school attendance of the State, as should be done under a correct interpretation of the expression "Average length of school term." The result might more properly be called "Average length of attendance," which is essentially what it is desired to know.

A method which has been in use in some States for finding the average school term of a county, for instance, is to weight the different school terms of the towns or districts the county is composed of by the number of schools in each. In other words, the total number of days (or months) all the schools of a county were kept is divided by the total number of schools to get the average time each one was kept. So, in finding the average term for the State, the school is taken as the unit instead of the pupil. When the schools differ much in size (number of pupils), as they do in all mixed urban and rural systems, varying from some half a dozen to 500 or more pupils each, the average term obtained by this method varies considerably from that obtained by the Bureau's method. The long terms of the large city schools not being given their proper weight, the resulting average is too small. The same objection applies still more forcibly to weighting the school terms of the different counties or towns by the number of school districts in each.

Another method is to divide the total number of months or days taught by the number of teachers. This is better than the preceding method, as it takes some account of the size of the schools—that is, an eight-grade school with eight teachers has eight times the weight, in determining the average term, than a district school with one teacher has. This is manifestly as it should be. If every

teacher taught the same number of pupils the result would be the same as by the Bureau's method. Care must be taken in working by this method to use the number of teachers' places (or number of teachers necessary to supply the schools) for the divisor; for if a teacher teaches a school or grade part of the term, and is replaced by another for the rest of the term, the two should obviously count as one teacher for the combined period of service. The liability to overlook this distinction in practice, as well as the inequality in the number of pupils to a teacher, makes this method generally objectionable.

Still another and most faulty method is to add together the school terms of the different counties or towns and divide by the number of such counties or towns; i. e., the simple arithmetical mean is taken. An example of this occurs in a school report, where it is stated that 14,193 pupils in one district attended 185 days and 856 pupils in another district attended 160 days, while the average time the whole 15,049 pupils attended is computed at $172\frac{1}{2}$ days, although nearly all (16 out of every 17) attended 185 days. This method, if it can be so called, gives altogether too short an average term, and nothing can be said in defense of it. It is as if, wishing to get the population per square mile of Minnesota and Dakota combined, we said, population per square mile of Minnesota, 9.86; of Dakota, 0.92; average number of persons per square mile in the combined territory $(0.92+9.86)\div 2=5.39$, instead of dividing the total population of the two States by the combined area in square miles.

The "aggregate number of days' attendance" is a statistical item of the utmost simplicity and of great value, about the meaning of which there can be little or no difference of opinion. Every teacher's register that records the number of pupils present each day in school, as they all presumably do, contains the data for ascertaining it for that school for the school year by the simple process of addition or summing up.

There are a few States that do not ascertain at all how long their schools were taught, and others that use methods so faulty that they also are totally in the dark in the matter. Yet this is one of the most necessary and fundamental items of information in determining the amount of school instruction given.

TABLE 8.—(1) Average length of school term at various periods; (2) aggregate number of days' schooling given to all pupils; (3) the same compared with the school population and the enrollment (columns 8 and 9).

State or Territory.	Average number of days the schools were kept during the year. ^a					Aggregate number of days' schooling given in 1900-1901.	Average number of days' school ing given for every child 5 to 18 years of age in 1900-1901.	Average number of days attended by each pupil enrolled in 1900-1901.
	1870-71.	1879-80.	1889-90.	1899-1900.	1900-1901.			
1	2	3	4	5	6	7	8	9
United States.....	132.1	130.3	134.7	141.5	144.2	1,542,074,161	70.4	93.8
North Atlantic Division.	152.0	159.2	166.6	177.5	177.2	473,055,482	90.3	128.0
South Atlantic Division.	97.4	92.4	99.9	111.9	112.1	156,796,216	46.7	70.6
South Central Division.	91.6	79.2	88.2	100.2	96.4	193,664,750	41.4	64.1
North Central Division.	133.9	139.8	148.0	155.9	157.5	657,208,413	84.3	109.3
Western Division.	119.2	129.2	135.0	141.5	143.0	81,539,940	77.1	97.6
North Atlantic Division:								
Maine.....	98	109	112	141	146	14,167,548	87.9	106.6
New Hampshire.....	70	105.3	117.7	147.65	<i>b</i> 147.65	6,690,361	<i>b</i> 78.6	<i>b</i> 106.3
Vermont.....	115.6	125.5	136	156.15	156.20	7,491,977	98.0	114.4
Massachusetts.....	169	177	177	189	185	68,643,880	103.2	146.6
Rhode Island.....	170	184	188	191	191	9,511,180	91.6	137.7
Connecticut.....	172.4	179	182.5	189.01	189.53	21,845,986	102.2	140.4
New York.....	176	178.5	186.5	175	177	162,596,978	91.7	130.8
New Jersey.....	178	192	192	186	183	41,540,740	85.9	123.5
Pennsylvania.....	127.2	133.4	147.6	166.6	165.6	140,336,892	82.4	120.8
South Atlantic Division:								
Delaware.....	132	158	166	170.1	<i>b</i> 170.1	64,908,530	<i>b</i> 87.9	<i>b</i> 116.6
Maryland.....	183	187	184	183	180	25,747,850	76.6	114.9
District of Columbia.	200	193	178	179	176	6,454,272	104.6	136.1
Virginia.....	93.2	112.8	118.2	<i>c</i> 119.4	<i>c</i> 119.4	24,254,438	41.5	<i>c</i> 67.5
West Virginia.....	76.8	90	97	106	<i>b</i> 106	16,032,924	<i>b</i> 54.2	<i>b</i> 69.0
North Carolina.....	<i>d</i> 59	50	59.25	70.5	76.1	19,254,746	30.2	44.6
South Carolina.....	<i>d</i> 100	70	69.6	88.4	86.6	18,025,666	38.3	63.2
Georgia.....	59	<i>d</i> 65	83.3	112.0	<i>d</i> 112.0	434,770,736	<i>d</i> 46.2	<i>d</i> 70.7
Florida.....			120	93	96	7,952,054	47.2	71.3
South Central Division:								
Kentucky.....	<i>d</i> 110	102	94	117.5	104.5	32,596,045	48.3	65.5
Tennessee.....	<i>d</i> 77	68	86	96	<i>b</i> 96	32,502,336	<i>b</i> 50.3	<i>b</i> 67.0
Alabama.....	66.5	81.3	73.5	78.3	<i>b</i> 78.3	23,318,132	<i>b</i> 38.2	<i>b</i> 61.9
Mississippi.....	110	74.5	<i>d</i> 86	<i>c</i> 105.1	<i>c</i> 105.1	21,187,424	<i>c</i> 40.6	<i>c</i> 58.8
Louisiana.....	<i>d</i> 65	78.8	100.6	120	<i>b</i> 120	16,839,040	<i>d</i> 36.6	<i>d</i> 84.6
Texas.....	<i>d</i> 140	71.7	100	108.2	110.27	42,332,738	40.2	64.2
Arkansas.....			<i>d</i> 75	77.5	84	17,038,308	37.9	52.6
Oklahoma.....				95.3	<i>b</i> 95.3	6,072,325	<i>b</i> 48.7	<i>b</i> 61.0
Indian Territory.					147	1,788,402	12.4	84.6
North Central Division:								
Ohio.....	165	152	166.5	165	163	100,184,935	90.2	120.7
Indiana.....	98.5	136	130	152	<i>b</i> 152	63,881,952	<i>d</i> 90.5	<i>d</i> 114.7
Illinois.....	146.7	150	155.4	152	159.6	120,769,396	88.5	125.3
Michigan.....	140	150	156	163.8	163	458,451,800	<i>d</i> 88.4	<i>d</i> 114.6
Wisconsin.....	155	165	158.6	<i>c</i> 160	169	47,119,014	75.5	105.6
Minnesota.....	<i>d</i> 83	94	128	169	173.25	41,487,935	78.3	102.9
Iowa.....	130	148	156	160	160	59,767,520	92.6	106.3
Missouri.....	90	<i>d</i> 104	129.4	144	145	66,656,866	71.8	93.7
North Dakota.....	<i>c</i> 75	<i>d</i> 96	{ 113	155.7	<i>b</i> 155.7	6,678,639	<i>b</i> 71.0	<i>b</i> 87.3
South Dakota.....			{ 145	129.1	144	9,194,445	70.9	91.4
Nebraska.....	72	82	140	135	133	29,675,207	90.8	163.9
Kansas.....	116	120	135	126.25	128.3	33,234,704	75.6	86.8
Western Division:								
Montana.....	<i>d</i> 89	96	142.7	107	<i>b</i> 107	3,151,814	<i>b</i> 54.1	<i>b</i> 74.3
Wyoming.....	<i>d</i> 200	119	<i>d</i> 120	<i>d</i> 110	<i>b</i> 110	1,064,000	<i>b</i> 48.1	<i>b</i> 73.3
Colorado.....	92	<i>d</i> 132	144.4	149.8	148.5	11,098,147	78.8	92.4
New Mexico.....	<i>d</i> 111	111	<i>d</i> 67	<i>f</i> 96.6	148	3,464,976	56.6	98.4
Arizona.....	0	109	126	125	<i>b</i> 125	1,272,125	<i>b</i> 40.0	77.1
Utah.....	152	128	133	151	152	8,164,662	88.0	106.7
Nevada.....	142	143	140	154	155	764,460	84.8	114.3
Idaho.....	<i>d</i> 45	94	<i>d</i> 69.8	106	<i>b</i> 106	2,327,972	<i>b</i> 50.3	<i>b</i> 63.5
Washington.....	<i>d</i> 80	<i>d</i> 91	97.2	127.6	119.5	9,727,300	70.8	78.8
Oregon.....	<i>d</i> 90	90	118.2	116.6	<i>b</i> 116.6	6,510,323	<i>b</i> 69.0	<i>b</i> 84.0
California.....	123	146.6	157.6	166.2	165.02	32,804,161	94.7	121.0

^a Certain States report their school term in months; these months have been reduced to days by multiplying by 20 in each case.

^b In 1899-1900.

^c In 1898-99.

^d Approximately.

^e In 1893-94.

^f In 1897-98.

DIAGRAM 3.—Average number of days the schools were kept each year since 1870-71.

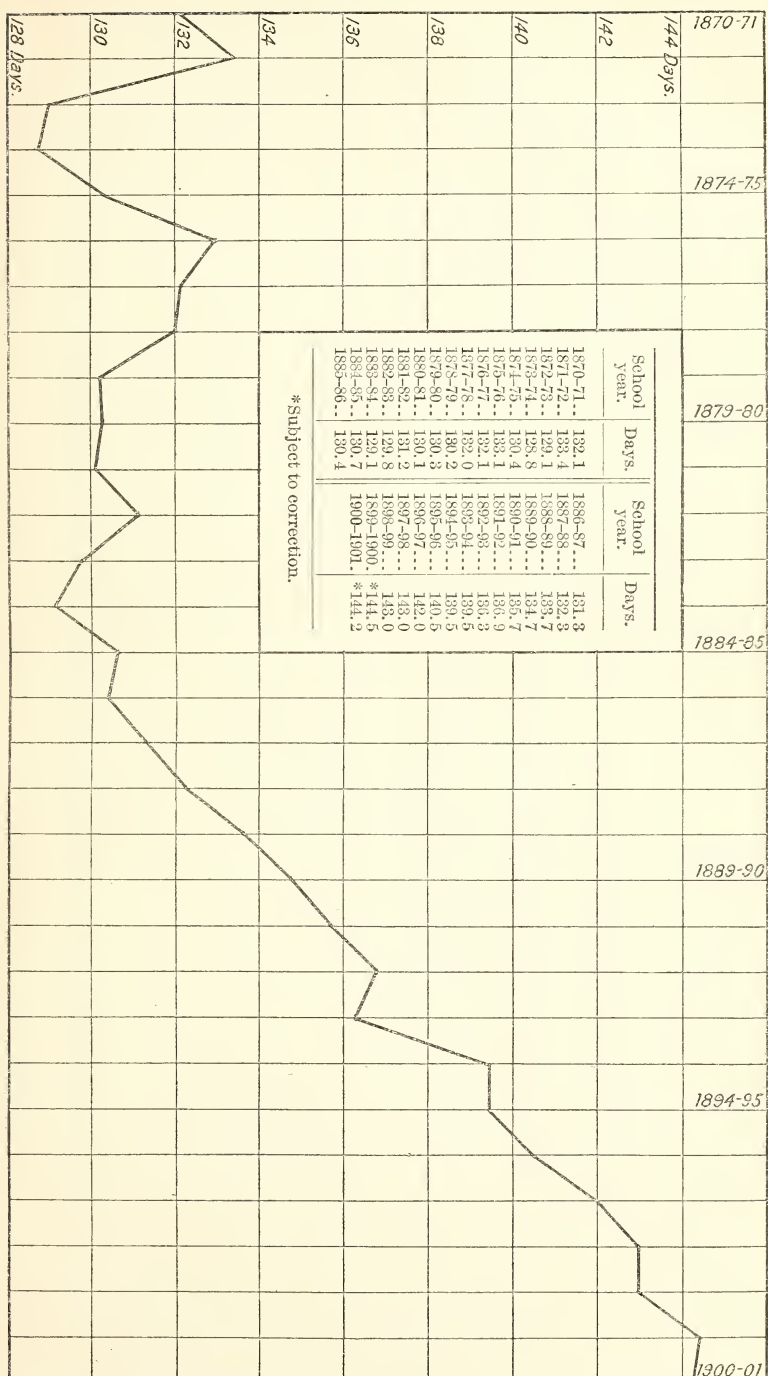


TABLE 9.—*Number and sex of teachers—Percentage of male teachers.*

State or Territory.	Whole number of different teachers employed.			Percentage of male teachers.				
	Male.	Female.	Total.	1870-71.	1879-80.	1889-90.	1899-1900.	1900-01.
1	2	3	4	5	6	7	8	9
United States	123,941	306,963	430,004	41.0	42.8	34.5	29.9	28.8
North Atlantic Division	18,897	87,303	106,200	23.2	28.8	20.0	18.4	17.8
South Atlantic Division	19,979	29,948	49,927	63.8	62.5	49.1	41.0	40.0
South Central Division	28,713	35,845	64,558	67.5	67.2	57.5	46.8	44.5
North Central Division	50,240	153,767	204,007	43.2	41.7	32.4	28.3	27.3
Western Division	6,112	19,200	25,312	45.0	40.3	31.1	24.7	24.1
North Atlantic Division:								
Maine	<i>a</i> 1,042	<i>a</i> 5,545	6,587	<i>a</i> 24.4	<i>a</i> 27.2	<i>a</i> 16.0	<i>a</i> 16.4	<i>a</i> 15.8
New Hampshire	<i>b</i> 244	<i>b</i> 2,496	<i>b</i> 2,740	15.0	16.8	9.8	8.9	<i>b</i> 8.9
Vermont	498	3,357	3,855	16.5	16.8	12.0	13.6	12.9
Massachusetts	1,214	12,408	13,622	12.7	13.2	9.8	8.8	8.9
Rhode Island	178	1,782	1,960	<i>a</i> 20.4	20.2	12.6	9.5	9.1
Connecticut	<i>a</i> 882	<i>a</i> 3,858	4,740	<i>a</i> 22.1	<i>a</i> 22.8	<i>a</i> 13.4	<i>a</i> 9.0	<i>a</i> 9.0
New York	5,147	30,444	35,591	22.9	26.0	16.9	14.9	14.5
New Jersey	998	6,563	7,561	32.5	28.5	18.4	12.9	13.2
Pennsylvania	9,194	20,850	30,044	42.8	45.5	34.2	32.0	30.6
South Atlantic Division:								
Delaware	<i>b</i> 210	<i>b</i> 621	<i>b</i> 831	<i>a</i> 29.9	<i>a</i> 46.6	<i>a</i> 31.0	25.3	<i>b</i> 25.3
Maryland	1,071	3,965	5,036	45.0	42.6	27.8	21.7	21.3
District of Columbia	164	1,119	1,283	8.2	7.8	13.0	13.1	12.8
Virginia	<i>c</i> 2,909	<i>c</i> 5,927	<i>c</i> 8,836	64.5	61.8	41.5	<i>c</i> 32.9	<i>c</i> 32.9
West Virginia	<i>b</i> 4,095	<i>b</i> 2,972	<i>b</i> 7,067	79.0	75.2	63.4	57.9	<i>b</i> 57.9
North Carolina	3,808	4,179	7,987	<i>a</i> 73.2	<i>a</i> 71.3	59.1	49.4	47.7
South Carolina	<i>a</i> 2,536	<i>a</i> 3,278	5,814	62.4	58.5	49.6	<i>a</i> 43.5	<i>a</i> 43.6
Georgia	<i>a</i> 4,249	<i>a</i> 6,051	10,300	71.4	<i>a</i> 65.2	53.3	44.0	<i>a</i> 41.3
Florida	837	1,836	2,773	<i>a</i> 65.7	61.5	48.0	33.9	33.8
South Central Division:								
Kentucky	4,711	5,802	10,513	<i>a</i> 66.0	64.6	49.8	45.5	44.8
Tennessee	<i>b</i> 4,930	<i>b</i> 4,235	<i>b</i> 9,165	<i>a</i> 75.0	74.4	61.8	<i>a</i> 54.0	<i>b</i> 53.9
Alabama	<i>b</i> 1,977	<i>b</i> 4,601	<i>b</i> 6,578	66.8	63.8	62.9	50.1	<i>b</i> 50.1
Mississippi	<i>c</i> 3,216	<i>c</i> 4,940	<i>c</i> 8,156	<i>a</i> 60.8	61.2	49.6	<i>c</i> 39.4	<i>c</i> 39.4
Louisiana	1,846	2,925	4,771	50.9	46.1	44.7	47.9	31.5
Texas	7,135	8,259	15,394	<i>a</i> 77.3	<i>a</i> 75.0	61.1	48.9	46.4
Arkansas	4,088	3,374	7,462	<i>a</i> 75.6	78.4	68.5	59.7	54.8
Oklahoma	<i>b</i> 1,004	<i>b</i> 1,339	<i>b</i> 2,343	-----	-----	-----	42.8	<i>b</i> 42.8
Indian Territory	235	390	625	-----	-----	-----	-----	40.5
North Central Division:								
Ohio	10,297	15,993	26,290	43.2	47.8	43.1	40.4	39.2
Indiana	7,179	8,800	15,979	60.5	57.5	51.1	46.2	44.9
Illinois	6,897	19,632	26,529	43.5	39.7	52.5	26.4	26.0
Michigan	3,040	13,014	16,054	26.3	29.2	22.3	20.3	18.9
Wisconsin	2,243	10,913	13,156	<i>a</i> 28.8	28.9	19.8	18.4	17.0
Minnesota	2,207	9,025	11,232	33.7	55.9	23.9	19.4	19.7
Iowa	4,757	24,088	28,845	39.0	35.6	20.6	17.2	16.5
Missouri	5,892	10,268	16,160	65.3	58.1	44.4	37.6	36.5
North Dakota	<i>b</i> 1,178	<i>b</i> 2,905	<i>b</i> 4,083	<i>a</i> 24.7	<i>a</i> 40.8	28.3	28.8	<i>b</i> 28.8
South Dakota	1,050	3,330	4,380	-----	-----	29.0	24.4	23.6
Nebraska	1,840	7,645	9,485	51.9	40.7	27.1	21.8	19.4
Kansas	3,660	8,094	11,754	47.2	45.1	40.8	32.7	31.1
Western Division:								
Montana	191	1,030	1,221	<i>a</i> 60.3	38.5	22.9	16.6	15.6
Wyoming	<i>b</i> 89	<i>b</i> 481	<i>b</i> 570	<i>a</i> 28.6	44.3	22.4	15.6	<i>b</i> 15.6
Colorado	781	2,963	3,744	48.8	36.4	26.2	20.9	20.9
New Mexico	564	432	996	<i>a</i> 91.7	78.0	<i>a</i> 62.2	<i>a</i> 55.2	53.9
Arizona	<i>b</i> 109	<i>b</i> 290	<i>b</i> 399	-----	47.5	38.8	27.3	<i>b</i> 27.3
Utah	537	994	1,531	55.0	54.5	46.6	36.5	35.1
Nevada	42	268	310	32.4	46.7	16.3	11.1	35.5
Idaho	<i>b</i> 231	<i>b</i> 729	<i>b</i> 1,060	<i>a</i> 64.3	57.4	<i>a</i> 33.4	31.2	<i>b</i> 31.2
Washington	1,073	2,796	3,869	<i>a</i> 46.5	57.4	40.6	28.9	27.7
Oregon	<i>b</i> 1,064	<i>b</i> 2,678	<i>b</i> 3,742	<i>a</i> 51.7	48.3	43.3	28.4	<i>b</i> 28.4
California	1,331	6,489	7,820	40.0	33.6	21.4	17.8	17.0

a Approximately.*b* In 1899-1900.*c* In 1898-99.

TABLE 10.—*Teachers' wages—Number of schoolhouses—Value of school property—Private school enrollment.*

State or Territory.	Average monthly salaries of teachers.		Number of buildings used as school houses. ^a	Estimated value of all public school property.	Private schools. ^b		
	Males.	Females.			Number of pupils enrolled.	Total public and private enrollment.	Per cent of pupils in private schools.
1	2	3	4	5	6	7	8
United States.....	<i>c</i> \$47.55	<i>c</i> \$39.17	249,969	\$576,963,089	1,381,300	16,984,751	8.13
North Atlantic Division.....	<i>c</i> 57.75	<i>c</i> 41.66	43,510	236,096,962	575,000	4,272,221	13.45
South Atlantic Division.....	<i>c</i> 29.62	<i>c</i> 28.39	36,945	23,524,568	132,100	2,351,617	5.61
South Central Division.....	<i>c</i> 42.36	<i>c</i> 34.47	50,529	27,004,428	182,500	3,295,405	5.47
North Central Division.....	49.32	38.80	105,026	241,366,344	427,000	6,257,362	6.82
Western Division.....	<i>c</i> 62.36	<i>c</i> 51.93	13,959	49,000,787	64,700	898,146	7.20
North Atlantic Division:							
Maine.....	35.66	26.88	4,018	4,538,018			
New Hampshire (1899-1900).....	54.11	28.60	1,862	4,524,480			
Vermont.....	36.00	25.00	2,239	<i>d</i> 1,800,000	<i>e</i> 7,019	76,003	13.57
Massachusetts.....	140.94	52.75	<i>e</i> 4,508	48,979,719	82,321	559,509	14.85
Rhode Island.....	115.32	51.14	538	5,463,369	17,869	86,936	20.55
Connecticut.....	96.12	45.32	1,532	11,852,881	28,582	184,171	15.53
New York.....			11,916	87,232,414	178,028	1,420,444	12.53
New Jersey.....	61.87	52.83	1,893	17,494,842	<i>e</i> 47,453	<i>e</i> 370,028	<i>e</i> 12.83
Pennsylvania.....	44.14	38.23	14,944	54,122,369			
South Atlantic Division:							
Delaware.....	<i>g</i> 36.60	<i>g</i> 34.08	<i>e</i> 550	<i>e</i> 1,043,997			
Maryland.....			2,535	<i>i</i> 4,790,000			
District of Columbia.....	<i>d</i> 94.48	<i>d</i> 64.31	138	4,352,531	<i>j</i> 5,000	<i>j</i> 47,464	<i>j</i> 10.54
Virginia (1898-99).....	32.09	26.59	7,218	3,336,166	25,000	383,825	6.51
West Virginia.....			<i>e</i> 5,916	<i>e</i> 3,966,601	<i>k</i> 1,894	<i>k</i> 220,700	<i>k</i> 0.86
North Carolina.....	24.92	22.53	7,082	1,335,658	<i>l</i> 26,198	<i>l</i> 361,556	<i>l</i> 7.25
South Carolina.....	<i>d</i> 25.96	<i>d</i> 23.20	4,918	<i>i</i> 990,000			
Georgia.....			6,246	<i>m</i> 2,738,800	<i>n</i> 27,285	<i>n</i> 442,932	<i>n</i> 6.16
Florida.....	38.27	33.66	2,342	970,815	<i>d</i> 2,487	<i>d</i> 110,942	<i>d</i> 2.24
South Central Division:							
Kentucky.....	<i>j</i> 44.03	<i>j</i> 37.18	8,302	5,810,745	18,974	516,833	3.67
Tennessee.....			<i>e</i> 7,185	<i>e</i> 3,063,568	<i>l</i> 45,428	<i>l</i> 532,935	<i>l</i> 8.53
Alabama.....	<i>e</i> 31.00	<i>e</i> 27.00	<i>e</i> 7,058	<i>e</i> 1,500,000	<i>o</i> 26,722	<i>o</i> 388,722	<i>o</i> 6.88
Mississippi.....	<i>p</i> 32.18	<i>p</i> 26.69	<i>o</i> 6,687	<i>e</i> 1,636,055	<i>p</i> 14,021	<i>p</i> 381,600	<i>p</i> 3.67
Louisiana.....	34.25	28.00	<i>e</i> 3,302	<i>i</i> 2,450,000	<i>e</i> 14,647	<i>e</i> 210,816	<i>e</i> 6.95
Texas.....	53.95	44.80	10,811	9,166,550			
Arkansas.....	39.00	35.00	5,254	<i>e</i> 2,616,537	9,659	353,518	2.90
Oklahoma.....	<i>o</i> 31.93	<i>o</i> 26.20	<i>e</i> 1,930	<i>e</i> 760,973			
Indian Territory.....							
North Central Division:							
Ohio.....	40.00	35.00	13,174	46,182,062	32,521	862,378	3.77
Indiana.....	63.40	42.40	10,003	25,000,000	4,500	561,231	.80
Illinois.....	61.69	53.51	12,852	50,839,941	142,076	1,105,710	12.85
Michigan.....	48.60	36.54	8,066	20,404,388	53,046	563,077	9.42
Wisconsin.....	53.33	39.52	7,179	16,574,795	55,789	502,096	11.11
Minnesota.....	44.80	36.45	7,248	18,094,872	<i>q</i> 20,073	<i>q</i> 372,165	<i>q</i> 5.39
Iowa.....	41.53	30.68	13,922	18,223,749	<i>o</i> 37,779	<i>o</i> 592,771	<i>o</i> 6.37
Missouri.....	<i>d</i> 49.50	<i>d</i> 42.50	10,299	20,328,279.	19,517	731,237	2.67
North Dakota (1899-1900).....	41.72	36.80	2,601	2,587,866			
South Dakota.....	34.70	31.17	3,735	2,086,315	<i>k</i> 1,888	<i>k</i> 89,914	<i>k</i> 2.10
Nebraska.....	47.54	38.23	6,773	9,870,684			
Kansas.....	42.90	35.85	9,174	11,173,393			
Western Division:							
Montana.....	73.86	50.11	712	7,400,250	1,816	44,216	4.11
Wyoming.....	<i>e</i> 73.68	<i>e</i> 43.36	<i>e</i> 524	<i>e</i> 453,607	<i>q</i> 175	<i>q</i> 11,428	<i>q</i> 1.53
Colorado.....	<i>e</i> 50.60	<i>e</i> 46.29	1,803	6,779,094	3,664	123,744	2.96
New Mexico.....			726	1,239,153	6,822	42,049	16.22
Arizona (1899-1900).....	76.90	63.40	257	529,024	1,212	17,716	6.84
Utah.....	65.65	45.10	715	3,000,000	2,814	79,345	3.55
Nevada.....	99.65	59.72	248	<i>e</i> 284,563	<i>e</i> 356	<i>e</i> 7,032	<i>e</i> 5.06
Idaho.....	<i>d</i> 56.11	<i>d</i> 44.83	<i>e</i> 756	<i>e</i> 855,702			
Washington.....	54.79	45.85	2,148	5,979,557	10,588	133,979	7.90
Oregon.....	<i>e</i> 44.46	<i>e</i> 35.53	<i>e</i> 2,070	3,440,670	10,649	100,654	10.65
California.....	85.10	65.81	<i>i</i> 4,000	19,039,167	<i>e</i> 23,304	<i>e</i> 293,040	<i>e</i> 7.95

^a Including buildings rented.^b The reports of private schools are more or less incomplete, and the number of pupils as given may be taken to represent the minimum number of private pupils in the States furnishing this item. In forming the totals the States not reporting are estimated.^c Average for those States reporting salaries.^d In 1897-98.^e In 1899-1900.^f Number of schools.^g In 1889-90.^h Approximately.ⁱ Estimated.^j In 1895-96.^k In 1893-94.^l In 1891-92.^m Does not include furniture and apparatus.ⁿ In 1892-93.^o In 1898-99.^p In 1896-97.^q In 1894-95.

Average salaries.—In computing (for Table 10) the average monthly wages of all the male (or female) teachers in the several groups of States, the average wages of each of the States in question is multiplied by the corresponding number of teachers. The sum of the resulting products is then divided by the sum of the teachers, and the quotient is the average wages of all. Each rate of wages thus receives its due weight.

To illustrate the principle: If 48 teachers receive an average of \$72.20 per month, they all receive in a month \$3,466; if 473 other teachers receive an average of \$48.60 per month, these together receive in a month \$23,988; the 521 teachers combined, therefore, receive per month \$26,454, or an average of \$50.77.

Attention is called to this subject for the reason that the practice of taking the arithmetical mean of a number of rates of wages (the mean is \$30.40 in the above case) in order to get the average of all is so common as to vitiate, to a considerable extent, the published statistics of average wages.

TABLE 11.—(1) *Length of school term.* (2) *The aggregate number of days' schooling given compared with the school population.*

Year.	Average length of school term, in days.						Average number of days' schooling given for every child 5 to 18 years of age.					
	The United States.	North Atlantic Division.	South Atlantic Division.	South Central Division.	North Central Division.	Western Division.	The United States.	North Atlantic Division.	South Atlantic Division.	South Central Division.	North Central Division.	Western Division.
1870-71	132.1	152.0	97.4	91.6	133.9	119.2	48.7	70.2	18.1	21.8	59.6	45.9
1871-72	133.4	151.9	103.4	97.7	136.1	121.8	49.5	68.9	20.3	25.8	59.8	46.0
1872-73	129.1	154.6	97.4	89.1	129.6	118.3	47.8	67.9	21.7	23.4	56.8	45.0
1873-74	128.8	154.8	95.6	81.1	132.6	119.0	49.6	70.4	24.5	21.9	59.8	46.1
1874-75	130.4	158.7	95.2	81.0	134.6	132.5	51.0	72.9	26.1	23.5	60.2	53.6
1875-76	133.1	158.0	95.6	82.5	139.1	130.3	51.4	73.7	26.8	20.1	62.2	54.4
1876-77	132.1	157.2	91.4	80.3	139.8	130.1	51.1	73.6	26.3	19.8	62.3	54.3
1877-78	132.0	157.6	89.7	86.7	140.1	129.9	53.2	75.6	26.8	24.3	64.3	54.5
1878-79	130.2	160.1	88.6	81.9	136.4	132.0	52.0	75.0	25.7	23.9	62.3	55.7
1879-80	130.3	159.2	92.4	79.2	139.8	129.2	53.1	74.5	29.3	24.2	64.4	54.9
1880-81	130.1	158.7	92.4	82.1	138.8	133.8	52.0	72.2	28.5	25.0	62.7	56.9
1881-82	131.2	160.6	95.9	82.5	137.1	136.2	52.9	73.3	30.6	25.6	63.2	58.0
1882-83	129.8	161.0	95.9	82.5	137.1	132.6	53.8	74.4	32.0	26.8	63.9	57.3
1883-84	129.1	156.0	95.6	85.9	138.6	133.8	55.5	72.5	32.7	30.0	67.7	61.6
1884-85	130.7	163.1	93.4	87.5	139.1	131.8	56.8	77.2	33.7	31.4	67.3	58.3
1885-86	130.4	161.6	93.4	86.9	140.4	130.8	57.3	76.7	33.7	32.0	68.7	59.6
1886-87	131.3	165.9	95.3	87.5	139.5	131.6	57.7	77.8	34.8	32.1	68.7	59.1
1887-88	132.3	164.4	95.7	87.6	144.0	130.7	58.7	76.8	35.5	33.6	71.3	57.3
1888-89	133.7	164.1	95.0	88.9	147.5	135.7	58.9	76.7	35.4	34.0	71.6	61.7
1889-90	134.7	166.6	99.9	88.2	148.0	135.0	59.2	76.8	37.3	33.9	71.9	61.2
1890-91	135.7	168.1	103.8	92.0	145.8	136.9	60.7	78.1	38.1	35.8	73.2	65.9
1891-92	136.9	169.1	105.3	94.1	146.8	139.1	61.5	78.3	38.2	37.7	73.6	71.1
1892-93	136.3	169.6	103.4	93.0	146.6	138.8	62.3	78.7	39.2	37.5	75.1	70.8
1893-94	139.5	172.3	108.3	97.5	150.2	137.1	65.9	82.2	42.4	41.2	79.1	72.4
1894-95	139.5	172.8	106.5	92.8	150.8	142.4	66.9	84.8	42.0	39.0	81.0	77.6
1895-96	140.5	175.5	107.8	92.2	151.9	142.0	68.1	86.8	42.1	39.8	82.3	78.7
1896-97	142.0	173.3	110.9	96.3	152.8	148.6	69.7	88.9	43.0	42.3	83.1	82.5
1897-98	143.0	174.3	113.8	97.4	152.8	151.7	71.2	90.4	46.9	42.5	84.8	82.1
1898-99	143.0	174.0	112.3	98.4	154.5	141.6	70.0	90.0	43.6	43.3	83.3	76.3
1899-1900 ^a	144.5	177.5	111.9	100.2	155.9	141.5	70.2	91.0	45.1	42.4	83.8	76.7
1900-1901 ^a	144.2	177.2	112.1	96.4	157.5	143.0	70.4	90.3	46.7	41.4	84.3	77.1

^a Subject to correction.

TABLE 12.—*School moneys received.*

State or Territory.	Income of permanent school funds and rent of school lands.	From taxation.			From other sources, State and local.	Total revenue (excluding balances on hand and proceeds of bond sales).
		From State taxes.	From local taxes.	Total from taxation.		
1	2	3	4	5	6	7
United States	\$9,823,482	\$38,476,250	\$161,245,764	\$199,722,014	\$25,422,423	\$234,967,019
North Atlantic Division:						
Maine	907,236	12,394,888	66,536,447	78,931,335	14,122,074	93,960,645
South Atlantic Division:	515,286	4,898,811	7,015,222	11,914,033	1,050,599	13,479,918
South Central Division:	1,733,564	8,000,592	4,879,136	12,879,728	1,312,162	15,925,454
North Central Division:	5,692,687	7,453,234	72,734,203	80,187,440	6,826,672	92,706,799
Western Division:	974,709	5,723,725	10,089,753	15,809,478	2,110,916	18,895,163
North Atlantic Division:						
Maine	34,748	534,538	1,179,489	1,714,048	0	1,748,796
New Hampshire (1899-1900)	15,797	55,519	997,667	1,053,186	51,326	1,120,219
Vermont (1899-1900)	51,835	87,637	661,981	749,618	86,171	887,624
Massachusetts	190,546	1,038,750	13,800,359	13,900,109	123,105	14,192,760
Rhode Island	15,115	132,113	1,320,090	1,452,212	71,649	1,523,860
Connecticut	153,898	326,577	2,562,055	2,888,632	78,990	3,124,436
New York	272,477	3,500,000	26,451,363	29,651,363	8,245,437	38,469,277
New Jersey	200,000	2,359,724	4,079,945	6,439,669	38,520	6,718,189
Pennsylvania	0	5,250,000	15,482,898	20,732,898	5,426,876	26,159,774
South Atlantic Division:						
Delaware (1899-1900)	61,379	89,432	115,735	265,167	25,090	407,576
Maryland	53,557	716,243	1,665,523	2,381,766	170,156	2,605,279
District of Columbia	0	0	1,516,411	1,516,411	0	1,516,411
Virginia (1898-1899)	47,533	964,282	943,346	1,907,628	55,463	2,010,624
West Virginia (1899-1900)	51,214	360,652	1,590,846	1,921,498	134,633	2,107,345
North Carolina	0	953,631	15,949	969,610	150,136	1,119,746
South Carolina	0	678,522	142,459	820,981	147,056	968,037
Georgia	212,052	1,068,515	423,283	1,461,803	337,898	2,011,695
Florida	33,751	97,504	571,665	669,169	30,227	733,147
South Central Division:						
Kentucky	(d)	1,857,719	932,893	2,790,585	225,589	3,016,174
Tennessee (1899-1900)	120,413	1,529,445	(e)	1,529,445	150,388	1,809,246
Alabama (1899-1900)	150,000	757,000	(e)	757,000	195,000	1,102,000
Mississippi (1898-99)	133,701	676,936	508,418	1,185,384	45,353	1,384,498
Louisiana	61,000	322,413	742,945	1,065,358	105,373	1,231,731
Texas	1,250,450	2,304,331	1,065,514	3,359,845	216,330	4,835,625
Arkansas	0	423,065	836,181	1,259,246	226,039	1,485,285
Oklahoma	0	129,653	442,773	572,426	144,647	717,073
Indian Territory	0	0	360,439	360,439	3,443	363,882
North Central Division:						
Ohio	242,257	1,788,258	11,351,987	13,135,245	860,250	14,257,752
Indiana	609,906	1,592,390	5,813,603	7,405,993	45,229	8,061,188
Illinois	837,121	1,000,000	17,627,936	18,627,936	706,122	20,171,179
Michigan	1,436,422	0	5,932,794	5,932,794	879,418	8,248,634
Wisconsin	167,391	630,000	4,714,208	5,344,208	652,882	6,164,571
Minnesota	(g)	1,462,066	4,436,918	5,898,984	1970,710	6,899,694
Iowa	108,943	0	8,410,034	8,410,034	1,057,079	9,576,056
Missouri	674,426	802,803	5,761,751	6,564,557	409,152	7,648,135
North Dakota (1899-1900)	144,626	0	926,764	926,764	83,106	1,456,496
South Dakota	307,105	0	1,343,842	1,343,842	78,674	1,729,621
Nebraska	474,929	182,714	2,563,722	2,746,436	925,881	4,147,246
Kansas	387,561	0	3,850,557	3,850,557	158,169	4,396,227
Western Division:						
Montana	35,153	747,050	86,685	833,125	235,528	1,103,816
Wyoming (1899-1900)	43,235	0	223,206	223,206	25,223	291,754
Colorado	117,548	0	2,661,587	2,661,587	391,301	3,170,436
New Mexico (1899-1900)	0	402,698	37,245	439,943	0	439,943
Arizona	(e)	11,100	218,580	229,680	48,849	278,529
Utah	28,496	339,728	147,062	477,730	884,806	1,391,092
Nevada	125,646	0	84,343	84,343	0	209,989
Idaho (1899-1900)	37,183	168,146	240,249	408,395	62,712	508,230
Washington	143,812	872,649	1,153,652	2,026,501	177,812	2,247,325
Oregon	208,043	0	1,002,475	1,002,475	163,407	1,573,939
California	335,858	3,196,354	4,226,209	7,422,563	121,278	7,779,399

a Reimbursement for superintendents' and teachers' salaries, etc.

b May include some State taxes.

c Includes United States appropriation.

d Not reported separately.

e Not reported.

f Includes some unclassified items.

g Included in column 3.

h Includes income from permanent fund.

i Includes proceeds of bond sales.

j State apportionment.

k In 1899-1900.

l Approximately.

m \$38,019 in 1900-1901.

TABLE 13.—*The school revenue compared with the school population and the adult male population (21 years and upward); percentage analysis of the school revenue.*

State or Territory.	Amount raised for each person 5 to 18 years of age.	Amount raised per adult male.	Amount each adult male contribute to provide \$1 for each person 5-18 years.	Per cent of the whole revenue derived from—			
				Perma- nent funds and rents.	State taxes.	Local taxes.	Other sources.
1	2	3	4	5	6	7	8
United States.....	\$19.73	\$10.93	\$1.02	4.2	16.4	68.6	19.8
North Atlantic Division.....	17.93	14.72	.82	1.0	13.2	70.8	15.0
South Atlantic Division.....	4.02	5.35	1.33	3.8	36.3	52.1	7.8
South Central Division.....	5.49	4.65	1.37	10.9	50.2	29.7	8.2
North Central Division.....	12.26	12.07	.98	6.1	8.0	78.5	7.4
Western Division.....	17.91	12.68	.71	5.2	30.3	53.3	11.2
North Atlantic Division:							
Maine.....	10.85	8.62	.74	2.0	50.6	67.4	0.0
New Hampshire (1899-1900).....	12.61	8.55	.68	1.4	5.0	89.0	4.6
Vermont (1899-1900).....	11.02	8.16	.74	5.8	9.9	74.6	9.7
Massachusetts.....	22.37	16.53	.74	1.1	a 8	97.2	0.9
Rhode Island.....	14.83	11.74	.79	1.0	8.6	85.8	4.6
Connecticut.....	14.62	10.86	.74	5.0	10.5	82.0	2.5
New York.....	21.70	17.27	.80	0.7	9.1	68.8	21.4
New Jersey.....	13.90	11.78	.85	3.0	35.7	69.7	0.6
Pennsylvania.....	15.36	14.14	.92	0.0	20.1	53.2	26.7
South Atlantic Division:							
Delaware (1899-1900).....	8.32	7.55	.91	b 28.8	22.0	43.1	6.1
Maryland.....	7.75	7.99	1.03	2.1	27.5	63.9	6.5
District of Columbia.....	24.56	17.75	.72	0.0	0.0	c 100.0	0.0
Virginia (1898-99).....	3.44	4.56	1.31	2.4	48.0	46.9	2.7
West Virginia (1899-1900).....	7.13	8.50	1.19	2.4	17.1	74.1	6.4
North Carolina.....	1.76	2.65	1.51	0.0	85.2	1.4	13.4
South Carolina.....	2.05	3.37	1.64	0.0	70.1	14.7	15.2
Georgia.....	2.67	3.95	1.48	10.5	51.6	21.1	16.8
Florida.....	4.25	5.10	1.17	4.6	13.3	78.0	4.1
South Central Division:							
Kentucky.....	4.47	5.47	1.22	(d)	61.6	30.9	7.5
Tennessee (1899-1900).....	2.80	3.71	1.33	7.2	84.5	(e)	8.3
Alabama (1899-1900).....	1.81	2.66	1.47	13.6	68.7	(e)	17.7
Mississippi (1898-99).....	2.61	4.00	1.51	9.8	49.6	37.3	3.3
Louisiana.....	2.68	3.70	1.33	4.9	26.2	60.3	8.6
Texas.....	4.60	6.35	1.38	26.0	47.7	21.8	4.5
Arkansas.....	3.30	4.66	1.41	0.0	28.5	56.3	15.2
Oklahoma.....	5.75	6.57	1.14	0.0	18.1	61.8	f 20.1
Indian Territory.....	2.52	3.43	1.37	0.0	0.0	99.0	1.0
North Central Division:							
Ohio.....	12.82	11.63	.91	1.7	12.5	79.8	6.0
Indiana.....	11.42	11.04	.97	7.6	19.7	72.1	0.6
Illinois.....	14.79	13.93	.94	4.1	5.0	87.4	3.5
Michigan.....	12.47	11.35	.91	17.4	0.0	71.9	10.7
Wisconsin.....	9.88	10.63	1.08	2.7	10.2	76.5	10.6
Minnesota.....	12.96	13.15	1.02	(g)	h 21.3	64.6	i 14.1
Iowa.....	14.83	14.84	1.00	1.1	0.0	87.8	11.1
Missouri.....	8.23	8.80	1.07	8.8	10.5	75.3	5.4
North Dakota (1899-1900).....	15.24	15.30	1.00	j 30.7	0.0	63.6	5.7
South Dakota.....	13.33	14.71	1.10	17.7	0.0	77.7	4.6
Nebraska.....	12.68	13.57	1.07	11.5	4.4	61.8	22.3
Kansas.....	10.00	10.56	1.06	8.8	0.0	87.6	3.6
Western Division:							
Montana.....	18.95	10.07	.53	3.2	67.7	7.8	21.3
Wyoming (1899-1900).....	13.20	7.70	.58	14.8	0.0	76.5	8.7
Colorado.....	22.52	16.17	.72	k 3.7	0.0	l 84.0	12.3
New Mexico (1899-1900).....	7.18	7.80	1.09	0.0	91.5	8.5	0.0
Arizona.....	8.76	6.32	.72	(e)	4.0	78.5	17.5
Utah.....	14.99	20.12	1.34	2.0	23.8	10.6	63.6
Nevada.....	23.29	11.85	.51	59.8	0.0	40.2	0.0
Idaho (1899-1900).....	10.98	9.42	.86	7.3	33.1	47.3	12.3
Washington.....	17.10	11.46	.67	6.1	37.2	49.1	7.6
Oregon.....	12.28	9.25	.75	15.1	0.0	73.0	11.9
California.....	22.44	13.98	.62	3.0	41.1	54.3	1.6

a Reimbursement for superintendents' and teachers' salaries, etc. f Includes some unclassified items.

b May include some State taxes.

c Includes United States appropriation.

d Not reported separately.

e Not reported.

f Includes some unclassified items.

g Included in State taxes.

h Includes income from permanent fund.

i Includes proceeds of bond sales.

j State apportionment.

k In 1899-1900.

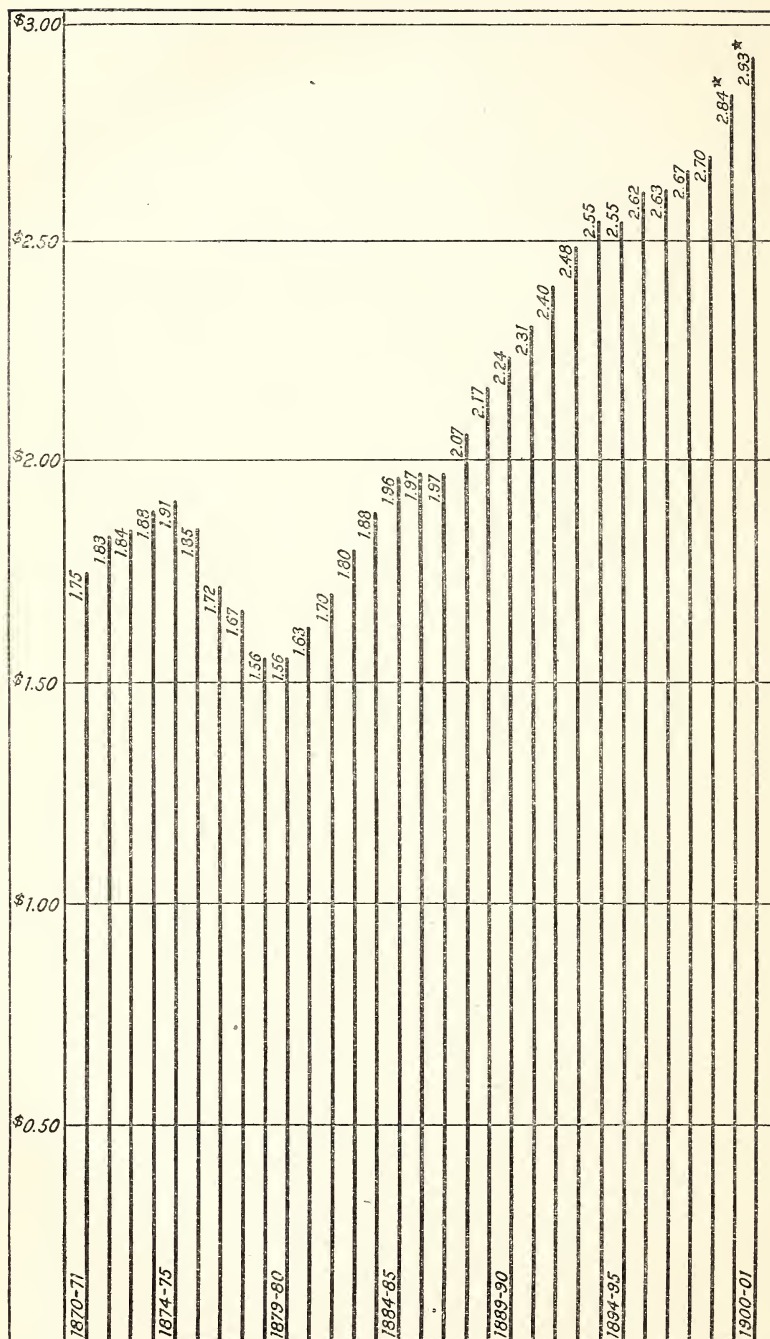
l Approximately.

TABLE 14.—*Progress of school expenditure.*

State or Territory.	Total amount expended for schools.					Expended per capita of total population.				
	1870-71	1879-80.	1889-90.	1899-1900.	1900-1901.	1870-71.	1879-80.	1889-90.	1899-1900.	1900-1901.
1	2	3	4	5	6	7	8	9	10	11
United States	\$69,107,612	\$78,094,687	\$149,506,715	\$214,867,718	\$226,043,236	\$1.75	\$1.56	\$2.24	\$2.84	\$2.93
N. Atlantic Div.	29,796,855	28,558,058	48,023,492	83,910,564	89,485,645	2.38	1.97	2.76	3.49	4.17
S. Atlantic Div.	3,781,581	5,130,492	8,767,165	12,903,823	13,439,344	0.63	0.68	0.99	1.24	1.28
S. Central Div.	4,854,834	4,872,829	10,678,680	14,674,850	15,149,371	0.73	0.55	0.97	1.07	1.06
N. Central Div.	28,430,033	35,285,635	62,823,563	86,165,827	90,073,228	2.14	2.09	2.81	3.27	3.36
Western Div.	2,244,329	4,267,673	10,213,815	17,212,614	17,895,648	2.15	2.41	3.37	4.21	4.25
N. Atlantic Div.:										
Me.	950,662	1,067,991	1,327,553	1,712,795	1,727,175	1.51	1.65	2.01	2.47	2.48
N. H.	418,545	565,359	844,333	1,052,202	^a 1,052,202	1.30	1.63	2.24	2.56	^a 2.76
Vt.	499,961	446,217	711,072	1,074,222	1,106,069	1.51	1.34	2.14	3.13	3.28
Mass.	5,579,363	4,983,900	8,286,062	13,826,243	14,179,947	3.73	2.80	3.70	4.93	4.66
R. I.	461,160	526,112	884,966	1,548,675	1,629,959	2.05	1.90	2.56	3.61	3.49
Conn.	1,496,981	1,408,375	2,157,614	3,189,249	3,391,886	2.74	2.26	2.89	3.51	3.64
N. Y.	9,607,904	10,296,977	17,543,890	33,421,491	36,395,270	2.17	2.06	2.92	4.00	4.91
N. J.	2,302,341	1,873,465	3,340,190	6,008,692	7,189,712	2.48	1.66	2.31	3.51	3.72
Pa.	8,479,918	7,369,682	12,928,422	21,476,985	22,813,395	2.36	1.72	2.46	3.41	3.55
S. Atlantic Div.:										
Del.	153,509	207,281	^b 275,000	453,670	^a 453,670	1.21	1.41	^b 1.63	2.46	^a 2.46
Md.	1,214,729	1,544,967	1,910,663	2,803,682	2,549,497	1.53	1.65	1.83	2.36	2.12
Dist. Col.	373,535	438,597	905,777	1,076,620	1,485,671	2.77	2.47	3.93	3.86	5.23
Va.	587,472	946,109	1,094,569	^c 1,971,264	^c 1,971,264	0.47	0.63	0.97	^a 1.08	^a 1.08
W. Va.	577,719	707,553	1,198,493	2,069,123	^a 2,069,123	1.26	1.14	1.57	2.10	^a 2.10
N. C.	177,498	376,062	714,300	950,317	1,152,920	0.16	0.27	0.44	0.50	0.60
S. C.	275,688	324,629	450,936	894,004	961,897	0.38	0.33	0.39	0.67	0.71
Ga.	292,060	471,629	1,196,354	1,980,016	2,083,366	0.24	0.31	0.61	0.89	0.92
Fla.	129,431	114,885	516,553	765,777	771,936	0.63	0.45	1.32	1.45	1.41
S. Central Div.:										
Ky.	^b 1,075,000	1,069,030	2,140,678	3,087,908	2,851,651	^b 0.80	0.65	1.15	1.41	1.30
Tenn.	^b 758,000	744,180	1,526,241	1,751,047	^a 1,751,047	^b 0.59	0.48	0.86	0.87	^a 0.87
Ala.	^b 570,000	^b 500,000	^b 800,000	923,464	^a 923,464	^b 0.36	0.40	0.56	0.50	^a 0.50
Miss.	950,000	850,705	1,109,575	^c 1,306,186	^c 1,306,186	1.11	0.73	0.86	^c 0.86	^c 0.86
La.	531,834	411,858	817,110	1,135,125	1,236,647	0.71	0.44	0.72	0.82	0.88
Tex.	^b 650,000	^b 630,000	3,178,900	4,465,255	4,640,470	0.74	0.65	1.42	1.46	1.47
Ark.	^b 520,000	287,056	1,016,776	1,369,810	1,360,594	^b 0.02	0.36	0.90	1.04	1.05
Okl.	-----	-----	-----	686,065	^a 686,065	-----	-----	-----	1.72	^a 1.72
Ind. T.	-----	-----	-----	-----	357,217	-----	-----	-----	-----	0.84
N. Central Div.:										
Ohio	6,831,095	7,166,963	10,602,238	13,395,211	14,245,886	2.52	2.24	2.88	3.21	3.59
Ind.	^b 2,897,537	4,491,850	5,245,218	8,182,526	8,632,534	^b 0.70	2.27	2.39	3.25	3.15
Ill.	6,656,542	7,014,092	11,645,126	17,757,145	19,031,463	2.57	2.28	3.04	3.68	3.83
Mich.	2,840,740	2,775,917	5,349,366	7,297,601	7,965,700	2.33	1.70	2.55	3.01	3.23
Wis.	1,932,559	2,177,023	3,801,212	5,493,707	5,881,473	1.70	1.65	2.25	2.65	2.80
Minn.	960,508	1,328,429	4,187,310	5,690,013	6,247,273	2.06	1.70	2.32	3.21	3.46
Iowa.	3,269,190	4,484,043	6,382,953	8,496,522	8,893,048	2.70	2.76	3.34	3.81	3.90
Mo.	1,749,049	2,675,364	5,434,262	7,816,056	7,660,158	0.99	1.23	2.03	2.52	2.49
N. Dak.	-----	-----	626,949	1,525,000	^a 1,525,000	-----	^b 1.29	^b 1.81	^b 3.43	^a 4.78
S. Dak.	^b 23,000	245,060	1,199,630	1,605,623	1,611,338	-----	-----	^b 3.65	4.00	^a 3.84
Nebr.	365,520	1,108,617	3,376,332	4,403,222	4,170,050	2.61	2.45	3.19	4.13	3.85
Kans.	904,323	1,818,337	4,972,967	4,622,264	4,666,210	2.24	1.83	3.48	3.14	3.15
Western Div.:										
Mont.	^b 35,600	78,730	364,084	923,310	879,882	^b 0.62	2.01	2.76	3.79	3.36
Wyo.	^b 7,000	28,504	^b 225,000	253,551	^a 253,551	^b 0.71	1.97	^b 3.71	2.74	^a 2.74
Colo.	^b 67,305	395,227	1,681,379	2,793,648	2,861,358	1.44	2.03	4.08	5.18	5.02
N. Mex.	^b 4,900	28,973	^b 85,000	343,429	723,048	^b 0.05	2.44	^b 0.55	1.76	3.61
Ariz.	0	61,172	181,914	280,730	^a 299,730	0.00	1.51	3.05	2.44	^a 2.44
Utah.	^b 117,000	132,194	394,685	1,064,757	1,342,858	^b 1.28	0.92	1.90	3.99	4.72
Nev.	^b 85,000	220,245	161,481	224,622	195,802	^b 0.93	3.54	5.33	5.30	4.62
Idaho.	19,003	38,411	169,020	400,043	^a 400,043	1.17	1.18	2.00	2.47	^a 2.47
Wash.	^b 35,000	112,615	958,111	2,375,753	2,290,313	^b 0.30	1.50	2.74	4.59	4.23
Oreg.	^b 160,000	307,031	805,979	1,594,420	1,350,820	^b 0.65	1.76	2.57	3.86	3.18
Cal.	1,713,431	2,864,571	5,187,162	6,909,351	7,280,243	2.93	3.31	4.29	4.65	4.80

^a In 1899-1900.^b Approximately.^c In 1898-99.

DIAGRAM 4.—Amount expended for common schools per capita of population each year since 1870-71.



* Subject to correction.

TABLE 15.—*The school expenditure of 1909-1901 classified.*

State or Territory.	Paid for sites, buildings, furniture, libraries, and apparatus.	Paid for teachers' and superintendents' salaries.	Paid for all other purposes, principally maintenance.	Total expenditure, excluding payment of bonds.
1	2	3	4	5
United States	\$40,361,964	\$142,776,168	\$42,905,104	\$226,043,236
North Atlantic Division.....	19,618,277	51,191,506	18,675,865	89,485,648
South Atlantic Division.....	1,378,792	9,995,584	2,034,968	13,439,344
South Central Division.....	1,113,805	12,629,569	1,366,057	15,149,371
North Central Division.....	15,505,426	57,290,202	17,277,600	90,073,228
Western Division.....	2,745,664	11,629,370	3,520,614	17,895,648
North Atlantic Division:				
Maine.....	273,456	1,193,422	260,297	1,727,175
New Hampshire (1899-1900).....	60,889	695,873	a 295,440	1,052,202
Vermont.....	202,081	671,236	232,832	1,106,069
Massachusetts.....	3,045,013	8,516,296	2,318,638	14,179,947
Rhode Island.....	263,629	1,040,870	325,460	1,629,959
Connecticut.....	532,960	2,078,266	780,690	3,391,886
New York.....	8,386,359	21,504,620	6,504,291	36,395,270
New Jersey.....	1,871,877	4,135,586	1,182,249	7,189,712
Pennsylvania.....	4,982,093	11,355,334	6,475,068	22,813,395
South Atlantic Division:				
Delaware (1899-1900).....	79,306	279,556	94,808	453,670
Maryland.....	127,546	2,044,144	377,807	2,549,497
District of Columbia.....	349,663	877,103	253,905	1,480,671
Virginia (1898-99).....	254,332	1,504,397	212,535	1,971,264
West Virginia (1899-1900).....	259,291	1,229,191	520,641	2,009,123
North Carolina.....	61,689	867,082	224,149	1,152,920
South Carolina.....	62,895	833,797	65,235	961,897
Georgia.....	b 87,452	1,770,030	c 225,384	2,083,366
Florida.....	96,118	590,284	85,534	771,936
South Central Division:				
Kentucky.....	252,964	2,362,129	236,558	2,851,651
Tennessee (1899-1900).....	117,096	1,403,848	230,103	1,751,047
Alabama (1899-1900).....	(d)	923,464	(d)	923,464
Mississippi (1898-99).....	35,401	1,125,920	144,865	1,306,186
Louisiana.....	60,036	1,011,376	165,235	1,236,647
Texas.....	342,664	4,087,340	210,436	4,640,470
Arkansas.....	171,336	1,189,472	35,796	1,396,594
Oklahoma (1899-1900).....	134,288	385,856	e 165,951	686,095
Indian Territory.....	(d)	f 180,104	177,113	357,217
North Central Division:				
Ohio.....	1,721,853	9,322,948	3,201,035	14,245,836
Indiana.....	886,044	4,930,293	2,216,137	8,032,534
Illinois.....	3,455,229	12,004,285	3,571,949	19,031,463
Michigan.....	1,515,303	4,735,192	1,715,215	7,965,700
Wisconsin.....	854,240	3,900,534	1,117,699	5,881,473
Minnesota.....	1,747,462	3,918,773	581,628	6,247,878
Iowa.....	g 1,001,668	5,747,339	2,036,041	h 8,885,048
Missouri.....	a 1,539,849	4,967,411	1,382,898	7,890,158
North Dakota (1899-1900).....	303,619	1,817,491	404,980	1,526,090
South Dakota.....	207,201	1,057,522	396,615	1,611,338
Nebraska.....	1,043,883	2,740,355	385,812	4,170,050
Kansas.....	1,199,075	3,219,054	248,061	4,666,210
Western Division:				
Montana.....	217,000	548,662	114,130	879,882
Wyoming (1899-1900).....	27,597	180,333	45,568	253,551
Colorado.....	400,379	1,710,071	750,908	2,861,358
New Mexico.....	(c)	412,340	510,768	723,048
Arizona (1899-1900).....	64,588	189,189	45,953	299,730
Utah.....	307,186	657,930	377,742	1,342,858
Nevada.....	6,433	163,280	26,064	195,802
Idaho (1899-1900).....	75,160	261,900	62,893	400,043
Washington.....	705,449	1,268,358	255,506	2,299,313
Oregon.....	164,323	918,940	267,557	1,350,820
California.....	777,404	5,273,224	1,239,615	7,290,243

a Includes bond payments.

b Cities not included.

c Includes expenditure for sites, buildings, etc., in cities.

d Not reported.

e Includes some unclassified items.

f Includes some miscellaneous expenditure.

g Expended from "schoolhouse fund."

h Interest on bonded debt not included.

i Included in column 4.

TABLE 16.—(1) *Expenditure per pupil (based on average attendance)*; (2) *average daily expenditure per pupil*; (3) *percentage analysis of school expenditure.*

State or Territory.	Average expenditure per pupil (for the whole school year).				Average daily expenditure per pupil.		Per cent of total expenditure devoted to—		
	For sites, buildings, etc.	For salaries.	For all other purposes.	Total per pupil.	For salaries only.	Total.	Sites, buildings, etc.	Salaries.	All other purposes.
1	2	3	4	5	6	7	8	9	10
United States	\$3.77	\$13.35	\$4.01	\$21.14	<i>Cents.</i> 9.3	<i>Cents.</i> 14.7	17.8	63.2	19.0
North Atlantic Division ..	7.35	19.18	7.00	33.52	10.8	18.9	21.9	57.2	20.9
South Atlantic Division...	.99	7.15	1.48	9.61	6.4	8.6	10.2	74.4	15.4
South Central Division...	.55	6.30	.68	7.54	6.5	7.8	7.4	83.6	9.0
North Central Division...	3.83	14.16	4.27	22.26	9.0	14.1	17.2	63.6	19.2
Western Division	4.83	20.44	6.19	31.46	14.3	22.0	15.3	65.0	19.7
North Atlantic Division:									
Maine	2.82	12.50	2.68	17.80	8.4	12.2	15.8	69.1	15.1
New Hampshire	1.29	14.72	<i>a</i> 6.25	22.26	10.0	15.1	5.8	66.1	<i>a</i> 28.1
Vermont	4.21	14.00	4.85	23.06	9.0	14.8	18.3	60.7	21.0
Massachusetts	8.21	22.94	7.06	38.21	12.4	20.7	21.5	60.0	18.5
Rhode Island	5.38	21.22	6.64	33.24	10.9	17.1	16.2	63.8	20.0
Connecticut	4.62	18.63	6.77	29.42	9.5	15.5	15.7	61.3	23.0
New York	9.60	24.63	7.45	41.68	13.2	22.4	23.0	59.1	17.9
New Jersey	8.46	18.69	5.34	32.49	10.0	17.3	26.0	57.5	16.5
Pennsylvania	5.88	13.40	7.64	26.92	8.1	16.2	21.8	49.8	28.4
South Atlantic Division:									
Delaware (1899-1900) ..	3.13	11.05	3.75	17.93	6.5	10.5	17.5	61.6	20.9
Maryland .....	.94	15.08	2.79	18.81	7.9	9.9	5.0	80.2	14.8
District of Columbia ..	9.54	23.90	7.06	40.50	13.6	23.0	23.5	59.1	17.4
Virginia (1898-99) ..	1.25	7.40	1.05	9.70	6.2	8.2	12.9	76.3	10.8
W. Virginia (1899-1900)	1.71	8.13	3.44	13.28	7.7	12.5	12.9	61.2	25.9
North Carolina .....	.24	3.43	.89	4.56	4.5	6.0	5.4	75.2	19.4
South Carolina .....	.30	4.01	.31	4.62	4.6	5.3	6.5	86.7	6.8
Georgia	<i>b</i> .28	5.63	<i>c</i> .72	6.68	5.1	6.0	<i>b</i> 4.2	85.0	<i>c</i> 10.8
Florida	1.27	7.84	1.14	10.25	7.4	9.7	12.4	76.5	11.1
South Central Division:									
Kentucky .....	.81	7.56	.76	9.13	7.2	8.7	8.9	82.8	8.3
Tennessee (1899-1900) ..	.35	4.15	.67	5.17	4.3	5.4	6.7	80.2	13.1
Alabama (1899-1900) ..	<i>(d)</i> .18	3.10	<i>(d)</i> .72	3.10	4.0	4.0			
Mississippi (1898-99) ..	.18	5.58	.72	6.48	5.3	6.2	2.7	86.2	11.1
Louisiana .....	.42	7.21	1.19	8.82	6.0	7.3	4.9	81.8	13.3
Texas .....	.41	9.10	.67	10.18	9.7	10.0	7.4	88.1	4.5
Arkansas .....	.84	5.86	.18	6.88	7.0	8.2	12.3	85.1	2.6
Oklahoma (1899-1900) ..	.50	6.19	<i>c</i> .32	7.01	8.0	9.0	7.1	88.2	<i>e</i> 4.7
Indian Territory	<i>(d)</i>	<i>f</i> 14.80	14.57	29.37	<i>f</i> 10.1	20.0	<i>(d)</i>	<i>f</i> 59.4	49.6
North Central Division:									
Ohio	2.82	15.27	5.24	23.33	9.3	14.2	12.1	65.4	22.5
Indiana	2.11	11.73	5.28	19.12	7.7	12.6	11.0	61.4	27.6
Illinois	4.57	15.87	4.72	25.16	9.9	15.8	18.1	63.1	18.8
Michigan	4.23	13.20	4.78	22.21	8.1	13.6	19.0	59.5	21.5
Wisconsin	3.06	14.02	4.01	21.10	8.3	12.5	14.5	66.5	19.0
Minnesota	7.39	16.37	2.42	26.09	9.4	15.1	28.0	62.7	9.3
Iowa	<i>g</i> 2.68	15.38	5.59	<i>h</i> 23.65	9.6	<i>h</i> 14.8	<i>g</i> 11.3	65.1	23.6
Missouri	<i>g</i> 3.42	10.69	3.01	17.12	7.4	11.8	<i>g</i> 20.0	62.4	17.6
North Dakota	6.97	18.77	9.30	35.03	12.0	22.5	19.9	53.6	26.5
South Dakota	3.20	16.02	5.66	24.88	11.3	17.5	19.2	64.4	22.7
Nebraska	5.72	15.01	2.11	22.84	9.2	14.1	25.0	65.7	9.3
Kansas	4.63	12.43	.95	18.01	9.7	14.0	25.7	69.0	5.3
Western Division:									
Montana	8.38	21.18	4.41	33.97	17.4	27.9	24.7	62.3	13.0
Wyoming (1899-1900) ..	2.72	17.74	4.49	24.95	16.1	22.7	10.9	71.1	18.0
Colorado	5.36	22.88	10.05	38.29	15.4	25.8	14.0	59.8	26.2
New Mexico	<i>(i)</i> 17.61	13.27	30.88	11.9	20.9	<i>(i)</i>		57.0	43.0
Arizona (1899-1900) ..	6.35	18.59	4.51	29.45	14.9	23.6	21.5	63.1	15.4
Utah	5.73	12.28	7.06	25.07	8.1	16.4	22.9	49.0	28.1
Nevada	1.31	33.11	5.28	39.70	21.4	25.6	3.3	83.4	13.3
Idaho (1899-1900) ..	3.42	12.39	2.41	18.22	11.7	17.2	18.8	68.0	13.2
Washington	8.67	15.95	3.63	28.25	13.3	23.6	30.7	56.5	12.8
Oregon	3.25	13.94	7.56	24.75	12.0	21.2	12.2	68.0	19.8
California	3.90	26.55	6.22	36.67	16.1	22.2	10.7	72.4	16.9

a Includes bond payments.*b* Cities not included.*c* Includes expenditure for sites, buildings, etc.,

in cities.

d Not reported.*e* Includes some unclassified items.*f* Includes some miscellaneous expenditure.*g* Expended from "schoolhouse fund."*h* Interest on bonded debt not included.*i* Included in "All other purposes."

TABLE 17.—(1) *School expenditure per capita of population; (2) same per capita of average attendance.*

Year.	Expended per capita of population.						Expended per pupil.					
	United States.	North Atlantic Division.	South Atlantic Division.	South Central Division.	North Central Division.	Western Division.	United States.	North Atlantic Division.	South Atlantic Division.	South Central Division.	North Central Division.	Western Division.
1870-71	\$1.75	\$2.38	\$0.63	\$0.73	\$2.14	\$2.15	\$15.20	\$18.31	\$10.27	\$9.06	\$14.87	\$21.87
1871-72	1.83	2.40	.68	.81	2.31	2.27	15.93	18.86	10.46	9.08	16.36	23.57
1872-73	1.84	2.44	.68	.74	2.31	2.42	16.06	19.89	9.25	8.39	16.53	23.04
1873-74	1.88	2.51	.76	.68	2.38	2.40	15.85	19.89	9.01	7.55	16.57	24.96
1874-75	1.91	2.45	.80	.73	2.36	2.40	15.91	20.17	8.98	7.51	16.69	25.85
1875-76	1.85	2.45	.79	.55	2.37	2.78	15.70	19.14	8.65	6.70	16.91	25.35
1876-77	1.72	2.29	.72	.51	2.21	2.61	14.64	17.89	7.68	6.25	15.93	24.69
1877-78	1.67	2.15	.70	.51	2.14	2.53	13.67	16.55	7.21	5.98	15.08	23.82
1878-79	1.56	2.03	.63	.55	2.00	2.53	12.97	16.05	6.76	5.65	14.39	23.59
1879-80	1.56	1.97	.68	.55	2.03	2.41	12.71	15.64	6.60	5.40	14.39	23.59
1880-81	1.63	2.08	.72	.58	2.09	2.54	13.61	17.14	7.22	5.72	15.19	24.81
1881-82	1.70	2.11	.78	.64	2.19	2.59	14.05	17.35	7.63	6.25	15.79	25.32
1882-83	1.80	2.22	.82	.68	2.34	2.74	14.55	18.17	7.46	6.17	16.69	25.39
1883-84	1.78	2.25	.84	.74	2.48	2.83	14.63	18.37	7.44	6.26	16.90	24.69
1884-85	1.96	2.38	.88	.82	2.53	2.80	15.12	19.19	7.32	6.74	17.53	25.31
1885-86	1.97	2.36	.88	.87	2.54	2.76	15.06	19.11	7.33	6.93	17.45	25.52
1886-87	1.97	2.35	.90	.87	2.55	2.88	15.07	19.38	7.33	6.88	17.45	24.85
1887-88	2.07	2.48	.95	.87	2.68	2.96	15.71	20.60	7.61	6.60	18.29	27.38
1888-89	2.17	2.59	.98	.94	2.76	3.28	16.55	21.64	7.77	7.12	19.30	29.37
1889-90	2.24	2.76	.99	.97	2.81	3.37	17.23	23.58	7.77	7.28	19.70	30.57
1890-91	2.31	2.90	1.06	1.04	2.85	3.91	17.54	23.66	8.52	7.78	19.42	33.42
1891-92	2.40	3.02	1.06	1.07	2.94	4.20	18.20	24.89	8.74	7.82	20.13	35.55
1892-93	2.48	3.13	1.09	1.06	3.06	4.20	18.58	25.01	8.65	7.72	20.62	35.57
1893-94	2.55	3.13	1.12	1.00	3.23	3.77	18.62	26.21	8.61	7.58	21.29	39.05
1894-95	2.55	3.28	1.11	1.00	3.13	3.67	18.41	23.84	8.58	7.69	20.26	27.32
1895-96	2.62	3.40	1.13	1.00	3.12	3.73	18.76	28.45	8.87	7.60	20.09	27.16
1896-97	2.63	3.65	1.17	1.04	3.06	3.76	18.67	28.77	8.92	7.09	19.75	28.86
1897-98	2.67	3.75	1.19	1.03	3.07	3.81	18.76	29.34	8.97	7.09	19.47	28.29
1898-99	2.70	3.71	1.24	1.04	3.15	3.84	19.38	29.38	9.96	7.17	20.62	28.50
1899-1900 ^a	2.84	3.99	1.24	1.07	3.27	4.21	20.28	31.82	9.69	7.37	21.12	30.98
1900-1901 ^a	2.93	4.17	1.28	1.06	3.36	4.25	21.14	33.52	9.61	7.54	22.26	31.46

^a Subject to correction.

TABLE 18.—*Wealth and school expenditure, 1880 and 1890.*

	True valuation of real and personal property. ^a		Expenditure for public schools (excluding debt paid).		Expended for public schools on each \$100 of true valuation of all real and personal property.	
	1880.	1890.	1880.	1890.	1880.	1890.
United States	\$43,642,000,000	\$64,829,040,611	\$78,094,687	\$140,506,715	<i>Cents.</i> 17.9	<i>Cents.</i> 21.7
North Atlantic Division.....	17,533,000,000	21,435,491,864	28,538,058	48,023,492	16.3	22.4
South Atlantic Division.....	3,759,000,000	5,132,880,000	5,120,432	8,767,105	13.6	17.1
South Central Division.....	3,882,000,000	6,193,230,433	4,872,829	10,678,680	12.6	17.2
North Central Division.....	16,186,000,000	25,255,915,549	35,285,635	62,823,553	21.8	24.9
Western Division.....	2,282,000,000	6,811,422,039	4,267,673	10,213,815	18.7	15.0
North Atlantic Division:						
Maine.....	511,000,000	489,124,128	1,067,991	1,327,553	20.9	27.1
New Hampshire.....	363,000,000	525,128,740	565,359	9,844,333	15.6	26.0
Vermont.....	302,000,000	265,567,523	446,217	711,072	14.8	26.8
Massachusetts.....	2,623,000,000	2,803,645,447	4,983,900	8,296,062	18.9	29.6
Rhode Island.....	400,000,000	504,162,552	526,112	884,966	13.2	17.6
Connecticut.....	779,000,000	835,120,219	1,408,375	2,157,014	18.1	25.8
New York.....	6,308,000,000	8,576,701,491	10,236,977	17,543,880	16.3	20.5
New Jersey.....	1,305,000,000	1,445,285,114	1,873,465	3,340,190	14.4	23.1
Pennsylvania.....	4,942,000,000	6,190,746,550	7,369,632	12,928,422	14.9	20.9
South Atlantic Division:						
Delaware.....	196,000,000	175,678,795	207,281	275,000	15.2	15.7
Maryland.....	857,000,000	1,085,473,048	1,544,367	1,910,663	18.5	17.6
District of Columbia.....	220,000,000	343,596,793	438,567	935,777	19.9	26.4
Virginia.....	707,000,000	862,318,070	946,169	1,094,569	13.4	18.6
West Virginia.....	350,000,000	438,954,881	707,553	1,198,493	20.2	27.3
North Carolina.....	461,000,000	584,148,999	576,062	714,900	8.2	12.2
South Carolina.....	222,000,000	400,911,303	324,629	450,936	10.1	11.2
Georgia.....	606,000,000	852,409,449	471,029	1,190,754	7.8	14.0
Florida.....	120,000,000	389,489,288	114,835	516,533	9.6	13.3
South Central Division:						
Kentucky.....	902,000,000	1,172,232,313	1,069,039	2,140,678	11.9	18.3
Tennessee.....	705,000,000	887,956,143	744,180	1,526,241	10.6	17.2
Alabama.....	428,000,000	632,773,504	500,000	890,000	11.7	14.3
Mississippi.....	354,000,000	454,242,688	830,705	1,109,575	23.5	24.4
Louisiana.....	382,000,000	495,301,537	411,858	817,110	18.6	16.5
Texas.....	825,000,000	2,105,576,766	1,030,070	3,178,900	12.5	15.1
Arkansas.....	285,000,000	455,147,422	287,056	1,016,776	10.0	22.3
Oklahoma.....						
Indian Territory.....						
North Central Division:						
Ohio.....	3,238,000,000	3,851,382,384	7,166,963	10,602,258	22.1	26.8
Indiana.....	1,681,000,000	2,095,176,626	4,491,850	5,245,218	28.7	25.0
Illinois.....	3,210,000,000	5,096,751,719	7,014,632	11,645,126	21.9	23.0
Michigan.....	1,580,000,000	2,095,016,272	2,775,917	5,349,376	17.6	25.5
Wisconsin.....	1,139,000,000	1,833,308,523	2,177,023	3,801,212	19.1	20.7
Minnesota.....	792,000,000	1,691,851,927	1,328,439	4,187,310	16.8	24.7
Iowa.....	1,721,000,000	2,287,248,333	4,484,043	6,382,953	26.1	27.9
Missouri.....	1,592,000,000	2,337,902,945	2,675,364	5,434,262	17.1	22.7
North Dakota.....	118,000,000	337,606,506	245,000	626,949	20.8	18.6
South Dakota.....		425,141,299		1,199,630		28.2
Nebraska.....	385,000,000	1,275,685,514	1,108,617	3,376,332	28.8	26.5
Kansas.....	760,000,000	1,799,243,561	1,818,337	4,972,967	23.9	27.6
Western Division:						
Montana.....	40,000,000	453,135,209	78,730	364,084	19.7	8.0
Wyoming.....	169,000,000	169,773,710	28,505	225,000	5.3	13.3
Colorado.....	240,000,000	1,145,712,267	395,227	1,681,379	16.5	14.7
New Mexico.....	49,000,000	231,450,897	28,973	85,000	5.9	3.7
Arizona.....	41,000,000	188,880,976	61,172	181,914	14.9	9.6
Utah.....	114,000,000	349,411,234	132,194	394,685	11.6	11.3
Nevada.....	156,000,000	180,323,668	220,245	161,481	14.1	9.0
Idaho.....		207,896,591	38,411	169,020	23.2	8.1
Washington.....	62,000,000	760,698,726	112,615	958,111	18.2	12.6
Oregon.....	154,000,000	590,396,194	307,031	805,979	19.9	13.7
California.....	1,343,000,000	2,533,733,637	2,864,571	5,187,162	21.3	20.5

^aFrom United States census reports.^bIncludes debt paid, if any.^cAmount of revenue.

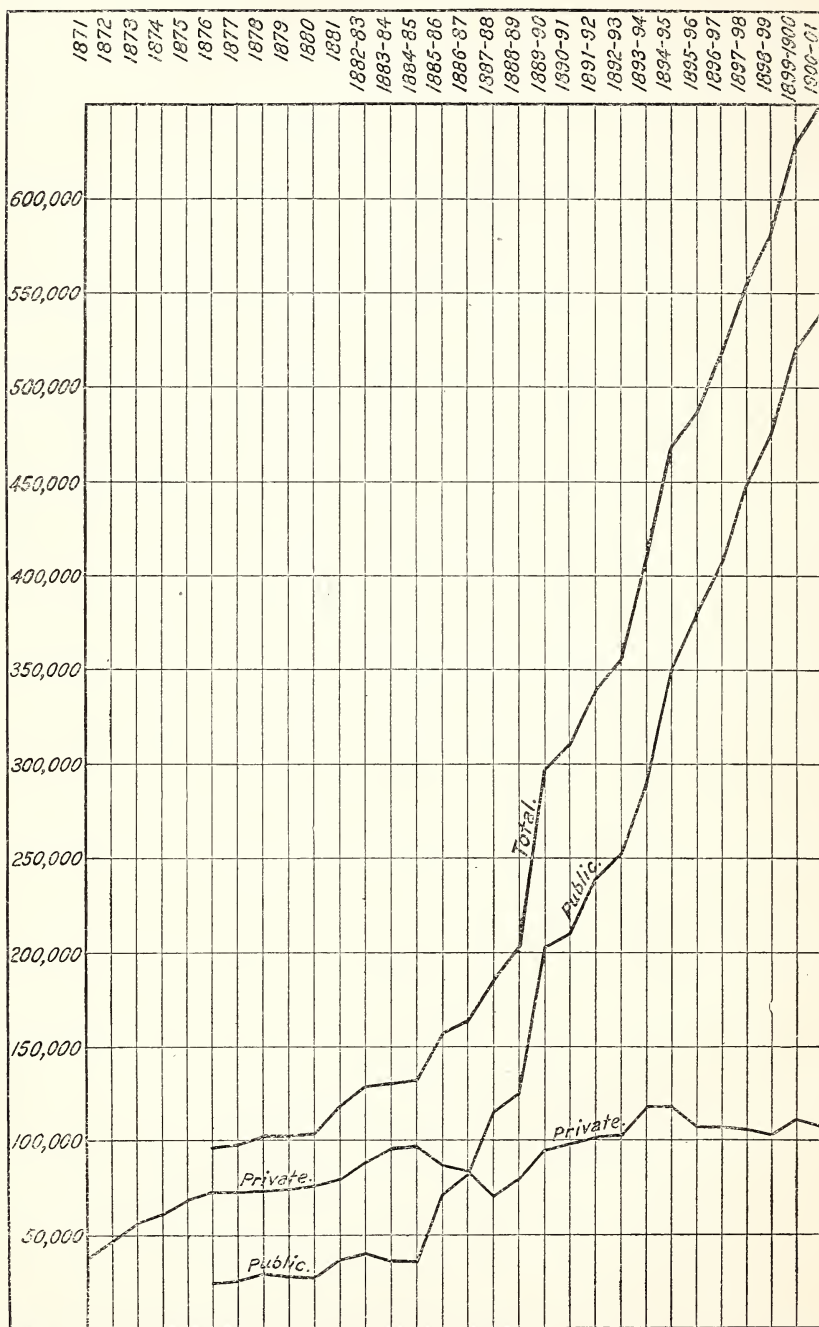
Number of secondary students in public and private high schools.

Year.	Secondary students.					
	In public high schools.	Per cent of population.	In private high schools.	Per cent of population.	In both classes of schools.	Per cent of population.
1871			a 33,280	0.097		
1872			a 48,660	.120		
1873			a 56,640	.137		
1874			a 61,860	.145		
1875			a 68,580	.157		
1876	22,982	0.051	a 73,740	.164	93,722	0.215
1877	24,925	.064	a 73,590	.160	98,485	.214
1878	28,124	.059	a 73,620	.155	101,744	.214
1879	27,163	.055	a 74,160	.152	101,323	.208
1880	26,009	.053	a 75,840	.151	102,449	.204
1881	36,564	.071	a 80,160	.156	116,754	.227
1882-83	39,581	.074	a 88,920	.166	123,501	.240
1883-84	34,672	.063	a 95,290	.174	129,352	.237
1884-85	35,307	.063	a 97,620	.173	132,327	.236
1885-86	70,241	.122	a 96,400	.150	155,641	.272
1886-87	80,004	.136	a 83,160	.142	163,164	.278
1887-88	116,000	.194	a 69,600	.116	185,600	.310
1888-89	125,542	.205	a 79,440	.130	204,982	.335
1889-90	b 292,963	b .324	94,321	.152	297,894	.476
1890-91	211,596	.331	98,400	.154	309,996	.485
1891-92	233,556	.330	100,739	.155	340,395	.524
1892-93	254,623	.383	102,375	.154	356,398	.537
1893-94	239,274	.425	118,645	.174	407,919	.599
1894-95	350,069	.500	118,247	.172	468,446	.681
1895-96	330,493	.530	106,654	.151	487,147	.690
1896-97	409,433	.574	107,633	.151	517,066	.725
1897-98	449,600	.618	105,225	.145	554,825	.763
1898-99	476,227	.642	103,838	.140	580,065	.782
1899-1900	519,251	.687	110,797	.147	630,048	.834
1900-1901	541,730	.701	108,221	.140	649,951	.841

^a From 1871 to 1887 this Bureau did not ask principals of private high schools and academies to report the number of students pursuing each secondary study. Prior to 1890 the number of students reported by a large number of these private schools included the total number in attendance, the elementary pupils as well as the secondary students. For the past nine years the two classes of students have been reported separately. Taking the reports from 1890 to 1895 as a basis, the number of secondary students in private high schools from 1871 to 1889 has been carefully estimated for each year.

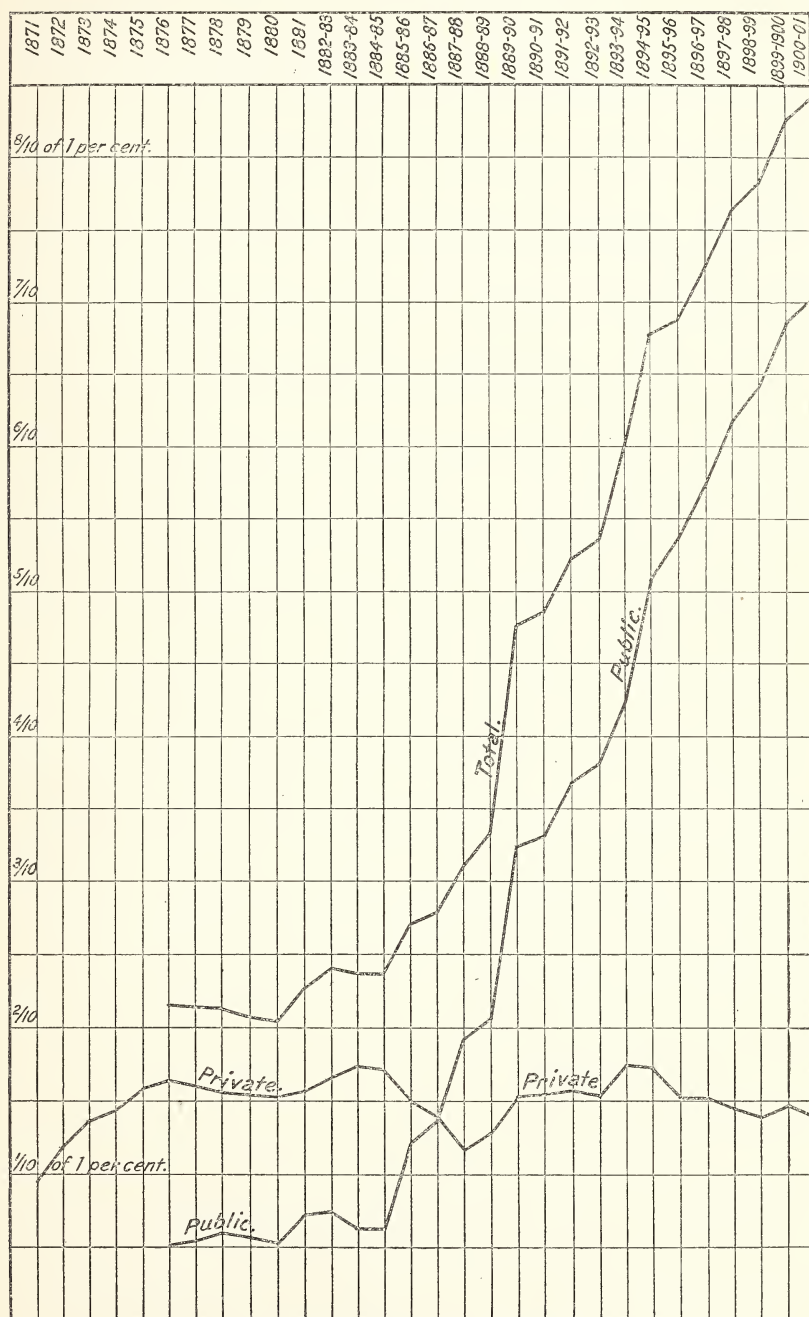
^b Previous to 1890 only the pupils in public city high schools are given. From 1890 onward all public high schools are included.

DIAGRAM 5.—*Number of secondary students in public and private secondary schools.*



NOTE.—In connection with this diagram, see the accompanying table and explanation, p. xcv.

DIAGRAM 6.—Percentage of the population enrolled as secondary students in public and private secondary schools.



NOTE.—See explanation to Diagram 5.

II.—TABLES OF SCHOOL EXPENDITURE IN THE SOUTHERN STATES, CLASSIFIED BY RACE.

Table A gives the school expenditure, classified by race, in each Southern State that reports the expenditure so classified, as far back as the record goes in each. In Maryland the expenditure for negro schools for the first three or four years is mainly in the city of Baltimore. The totals include only the States tabulated.

Table B gives the white and colored school population (children 5 to 18 years of age) in each case where the school expenditure is given in Table A.

Table C gives the expenditure for white schools per capita of white school population, and the corresponding per capita for the negro schools. The averages include only the States recorded each year.

In making an estimate of the white and colored school expenditure of the remaining Southern States the most obvious assumption to make in the absence of any positive information is to consider that their white and colored school per capita expenditures bear the same ratio to each other each year as that of the average per capitae given in Table C. It is upon this basis that the classifications by race have been made that are given in Table D, except for the years 1870-71 and 1871-72, in which the ratio of white to colored per capita was taken at about 6.

TABLE A.—Expenditure for white and colored schools.

Year.	District of Columbia.		Florida.		Kentucky.		Maryland.		North Carolina. ^a		South Carolina.		Texas. ^b		Total.	
	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.
1869-70.....	\$1,224,349	e \$90,912	.....	.....	.....	.....	.....	.....	\$1,234,349	\$90,912
1870-71.....	411,120,145	e 28,571	.....	.....	.....	.....	.....	.....	1,120,145	28,571
1871-72.....	1,153,035	e 55,350	.....	.....	.....	.....	.....	.....	1,153,035	55,350
1872-73.....	1,250,615	e 70,572	.....	.....	.....	.....	.....	.....	1,302,730	116,526
1873-74.....	1,389,165	e 94,759	.....	.....	.....	.....	.....	.....	1,571,512	172,574
1874-75.....	1,470,022	e 119,080	.....	.....	.....	.....	.....	.....	1,782,894	263,894
1875-76.....	1,413,088	e 119,856	.....	.....	.....	.....	.....	.....	1,840,585	355,441
1876-77.....	1,400,000	e 150,000	.....	.....	.....	.....	.....	.....	1,840,585	355,441
1877-78.....	1,385,334	e 179,500	.....	.....	.....	.....	.....	.....	1,837,634	363,806
1878-79.....	1,383,221	e 154,032	.....	.....	.....	.....	.....	.....	1,837,634	363,806
1879-80.....	1,368,740	e 150,426	.....	.....	.....	.....	.....	.....	1,830,179	368,743
1880-81.....	1,417,167	e 151,544	.....	.....	.....	.....	.....	.....	2,020,040	411,676
1881-82.....	1,434,982	e 159,569	.....	.....	.....	.....	.....	.....	3,062,788	445,062
1882-83.....	1,477,835	e 171,048	.....	.....	.....	.....	.....	.....	3,158,820	476,769
1883-84.....	1,500,941	e 172,254	.....	.....	.....	.....	.....	.....	3,063,921	621,135
1884-85.....	1,611,319	e 178,450	.....	.....	.....	.....	.....	.....	3,274,189	741,048
1885-86.....	1,611,319	e 178,450	.....	.....	.....	.....	.....	.....	3,368,362	699,651
1886-87.....	1,598,251	e 184,630	.....	.....	.....	.....	.....	.....	3,723,172	727,869
1887-88.....	1,622,026	e 190,741	.....	.....	.....	.....	.....	.....	3,943,800	806,846
1888-89.....	1,688,010	e 222,653	.....	.....	.....	.....	.....	.....	4,136,979	798,075
1889-90.....	1,894,420	e 226,300	.....	.....	.....	.....	.....	.....	4,460,249	856,855
1890-91.....	1,894,420	e 226,300	.....	.....	.....	.....	.....	.....	4,520,035	894,456
1891-92.....	1,894,420	e 226,300	.....	.....	.....	.....	.....	.....	4,520,035	894,456
1892-93.....	1,894,420	e 226,300	.....	.....	.....	.....	.....	.....	4,520,035	894,456
1893-94.....	1,894,420	e 226,300	.....	.....	.....	.....	.....	.....	4,520,035	894,456
1894-95.....	1,894,420	e 226,300	.....	.....	.....	.....	.....	.....	4,520,035	894,456
1895-96.....	1,894,420	e 226,300	.....	.....	.....	.....	.....	.....	4,520,035	894,456
1896-97.....	1,894,420	e 226,300	.....	.....	.....	.....	.....	.....	4,520,035	894,456
1897-98.....	1,894,420	e 226,300	.....	.....	.....	.....	.....	.....	4,520,035	894,456
1898-99.....	1,894,420	e 226,300	.....	.....	.....	.....	.....	.....	4,520,035	894,456
1899-1900.....	1,894,420	e 226,300	.....	.....	.....	.....	.....	.....	4,520,035	894,456
1900-1901.....	1,894,420	e 226,300	.....	.....	.....	.....	.....	.....	4,520,035	894,456

^a Excluding certain sums not classified by race.^b Amount paid teachers from public funds.^c Does not include permanent improvements in Baltimore city.^d Does not include permanent improvements outside of Baltimore.^e For teachers' salaries only (or cost of tuition).^f Approximately.^g Does not include school buildings and sites.^h For 8 months.

TABLE B.—*Estimated number of children 5 to 18 years of age.*

Year.	District of Columbia.		Florida.		Kentucky.		Maryland.		North Carolina.		South Carolina.		Texas.		Total.	
	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.
1869-70 ^a							188,294	56,220							188,294	56,220
1870-71							190,700	57,000							190,700	57,000
1871-72							193,200	57,000							193,200	57,000
1872-73							195,700	58,800							195,700	58,800
1873-74							198,300	59,000	235,300	150,100					433,600	208,900
1874-75	27,140	12,930					200,800	61,400	239,300	155,000					457,600	214,000
1875-76	28,480	13,620					203,500	62,300	243,400	160,000					471,500	223,400
1876-77	29,170	13,930					206,100	63,200	247,500	165,200					478,800	233,900
1877-78	30,700	14,600					208,800	63,200	251,800	170,400					486,380	246,320
1878-79	32,310	15,417					211,500	64,200	256,100	175,900					502,600	253,030
1879-80 ^a	32,850	15,417					214,297	65,115	264,890	187,274					502,600	260,400
1880-81	33,330	16,410					216,500	65,400	273,000	192,600					507,600	260,400
1881-82	33,840	16,880					218,000	65,800	284,890	198,900					507,600	260,400
1882-83	34,300	17,350					220,800	66,100	289,800	195,400					507,600	260,400
1883-84	34,760	17,840					223,100	66,300	298,700	200,800					507,600	260,400
1884-85	35,330	18,330					225,300	66,700	307,800	200,800					507,600	260,400
1885-86	35,920	18,960					227,600	67,000	317,100	203,600					507,600	260,400
1886-87	36,510	19,540					229,900	67,300	326,800	206,200					507,600	260,400
1887-88	37,120	20,140					232,200	67,600	336,800	208,900					507,600	260,400
1888-89	37,730	20,754					234,500	68,000	347,000	211,700					507,600	260,400
1889-90 ^a	38,340	21,360					236,800	68,300	357,500	214,411					507,600	260,400
1890-91	38,950	21,970					239,100	68,600	367,700	217,100					507,600	260,400
1891-92	39,560	22,580					241,400	68,900	377,900	219,800					507,600	260,400
1892-93	40,170	23,190					243,700	69,200	387,900	222,500					507,600	260,400
1893-94	40,780	23,800					246,000	69,500	397,900	225,200					507,600	260,400
1894-95	41,390	24,410					248,300	69,800	407,900	227,900					507,600	260,400
1895-96	42,000	25,020					250,600	70,100	417,900	230,600					507,600	260,400
1896-97	42,610	25,630					252,900	70,400	427,900	233,300					507,600	260,400
1897-98	43,220	26,240					255,200	70,700	437,900	236,000					507,600	260,400
1898-99	43,830	26,850					257,500	71,000	447,900	238,700					507,600	260,400
1899-1900 ^a	44,440	27,460					259,800	71,300	457,900	241,400					507,600	260,400
1900-1901	45,050	28,070					262,100	71,600	467,900	244,100					507,600	260,400

^a United States Census.

TABLE C.—Expenditure per capita of school population (5 to 15 years of age).

Year.	District of Columbia.		Florida.		Kentucky.		Maryland.		North Carolina. ^a		South Carolina.		Texas. ^b		Average.	
	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.
1898-70							\$6.56	<i>c</i> \$0.55							\$6.56	\$0.55
1870-71							<i>d</i> 5.87	<i>e</i> .50							5.87	.50
1871-72							5.97	.96							5.97	.96
1872-73							6.30	<i>c</i> 1.20							6.30	1.20
1873-74		<i>e</i> \$4.85					7.01	<i>e</i> .76	<i>e</i> \$0.31						7.01	.76
1874-75		7.06					7.32	<i>c</i> 1.59	<i>f</i> .53						7.32	1.59
1875-76		7.88					6.94	1.95	<i>f</i> .74						6.94	1.95
1876-77		7.63					<i>f</i> 6.79	<i>f</i> 2.41	<i>f</i> .54						6.79	2.41
1877-78		9.16					6.65	.88	<i>f</i> .70						6.65	.88
1878-79		8.78					6.54	<i>e</i> 2.84	<i>f</i> .61						6.54	2.84
1879-80		10.34					6.50	<i>e</i> 2.40	.74						6.50	.74
1880-81		9.83					6.59	.66	.64						6.59	.66
1881-82		9.83					6.55	.76	.79						6.55	.76
1882-83		9.74					6.29	2.36	.83						6.29	2.36
1883-84		9.74					6.05	2.41	1.06						6.05	2.41
1884-85		9.91					6.02	2.58	.93						6.02	.93
1885-86		9.91					6.70	2.58	1.02						6.70	1.02
1886-87		8.05					6.93	2.64	1.16						6.93	1.16
1887-88		8.05					6.88	2.65	1.25						6.88	1.25
1888-89		8.07					6.88	2.73	1.17						6.88	1.17
1889-90		8.07					6.88	2.73	1.20						6.88	1.20
1890-91		8.07					6.88	2.73	<i>h</i> .92						6.88	.92
1891-92		8.07					6.88	2.73	1.18						6.88	1.18
1892-93		8.07					6.88	2.73	1.11						6.88	1.11
1893-94		8.07					6.88	2.73	1.23						6.88	1.23
1894-95		8.07					6.88	2.73	1.22						6.88	1.22
1895-96		8.07					6.88	2.73	1.21						6.88	1.21
1896-97		8.07					6.88	2.73	1.27						6.88	1.27
1897-98		8.07					6.88	2.73	1.22						6.88	1.22
1898-99		8.07					6.88	2.73	1.22						6.88	1.22
1899-1900		8.07					6.88	2.73	1.22						6.88	1.22
1900-1901		8.07					6.88	2.73	1.22						6.88	1.22

^a Excluding certain sums not classified by race.^b Amount paid teachers from public funds.^c Does not include permanent improvements in Baltimore city.^d Does not include permanent improvements outside of Baltimore city.^e For teachers' salaries only (or cost of tuition).^f Approximately.^g Does not include school buildings and sites.^h For 8 months.

TABLE D.—*Estimated white and colored school expenditure for all the former slave States.*

Year.	Total expenditure for both races.	Estimated expenditure for each race.		Estimated school population (i. e., children 5 to 18 years of age).		Expenditure per capita of school population.	
		White.	Colored.	White.	Colored.	White.	Colored.
1869-70.....				^a 3,164,729	^a 1,528,281		
1870-71.....	\$10,385,464	\$9,605,158	\$780,306	3,236,630	1,578,170	\$2.97	\$0.49
1871-72.....	11,623,238	10,742,316	880,922	3,310,920	1,629,880	3.24	.54
1872-73.....	11,176,048	10,271,448	904,600	3,347,360	1,683,040	3.03	.54
1873-74.....	11,823,775	10,636,792	1,186,983	3,466,120	1,737,980	3.07	.68
1874-75.....	13,021,514	11,297,560	1,723,954	3,547,430	1,794,870	3.18	.96
1875-76.....	12,033,855	10,308,360	1,725,595	3,631,490	1,853,400	2.84	.93
1876-77.....	11,231,073	9,389,620	1,841,453	3,717,920	1,914,086	2.53	.96
1877-78.....	12,093,091	9,961,260	2,161,831	3,897,290	1,976,910	2.61	1.09
1878-79.....	12,174,141	10,123,542	2,050,599	3,900,250	2,042,150	2.60	1.00
1879-80.....	12,678,685	10,558,200	2,120,485	^a 3,996,896	^a 2,109,650	2.64	1.01
1880-81.....	13,656,814	11,312,573	2,344,241	4,096,800	2,145,990	2.76	1.09
1881-82.....	15,241,740	12,532,246	2,709,494	4,199,900	2,183,660	2.98	1.24
1882-83.....	16,363,471	12,730,938	3,632,533	4,306,000	2,221,939	2.96	1.63
1883-84.....	17,884,558	13,967,752	3,916,806	4,414,900	2,261,049	3.16	1.73
1884-85.....	19,253,874	14,969,261	4,284,613	4,527,390	2,301,270	3.31	1.86
1885-86.....	20,208,113	15,924,766	4,283,347	4,641,500	2,341,520	3.43	1.83
1886-87.....	20,821,969	16,392,646	4,429,323	4,759,100	2,382,570	3.44	1.86
1887-88.....	21,810,158	16,864,157	4,946,001	4,880,100	2,424,330	3.46	2.04
1888-89.....	23,171,878	18,158,290	5,013,588	5,004,900	2,467,040	3.63	2.03
1889-90.....	24,880,107	19,461,742	5,418,365	^a 5,132,948	^a 2,510,847	3.79	2.16
1890-91.....	26,690,310	21,299,516	5,480,794	5,204,500	2,539,380	4.07	2.17
1891-92.....	27,691,488	21,301,185	6,390,303	5,277,530	2,549,790	4.04	2.51
1892-93.....	28,535,738	22,318,421	6,217,317	5,351,500	2,569,480	4.17	2.42
1893-94.....	29,223,546	23,046,842	6,176,704	5,423,970	2,589,160	4.25	2.39
1894-95.....	29,443,584	24,207,647	5,235,937	5,503,700	2,609,060	4.40	2.01
1895-96.....	31,149,724	25,366,470	5,783,254	5,578,770	2,628,630	4.55	2.20
1896-97.....	31,286,883	25,351,765	5,935,118	5,655,040	2,647,220	4.48	2.24
1897-98.....	31,247,218	25,394,118	5,853,100	5,732,630	2,666,440	4.43	2.20
1898-99.....	33,110,581	27,314,375	5,796,206	5,811,980	2,685,700	4.70	2.16
1899-1900 ^b	34,708,668	28,789,332	5,925,336	^a 5,892,392	^a 2,705,142	4.88	2.19
1900-1901 ^b	35,405,561	29,370,011	6,035,550	5,964,665	2,724,223	4.92	2.21
Totals.....	650,023,877	528,842,209	121,184,568				

^a United States Census.^b Approximately.

It will be observed that according to the foregoing table the estimated expenditure for colored schools at times varies abruptly; there was a large increase in 1891-92, and a falling off equally as large in 1894-95. This irregularity did not of necessity actually exist, but results from the way in which the estimates were made, as explained on page xcvi. In 1891-92 Texas, which had a large per capita expenditure for colored schools, entered into the average, and in 1894-95 South Carolina, with its correspondingly small expenditure. The estimate for 1899-1900 is based upon the classified race expenditure of six States, and probably gives a sufficiently close approximation.

III.—PUBLICATIONS OF THE UNITED STATES BUREAU OF EDUCATION.

[From 1867 to 1902.]

1. Annual Report of the Commissioner of Education, 1867-68. Barnard. 8°. pp. xl+853. Out of print.
2. Special Report of the Commissioner of Education on the condition and improvement of public schools in the District of Columbia. Barnard. 8°. pp. 912. Washington, 1871. (Reprinted as Barnard's *Am. Jour. of Education*, vol. 18.) Out of print.
3. Annual Report of the Commissioner of Education for the year 1870. Eaton. 8°. pp. 579. Washington, 1870. Out of print.
4. ——— 1871. Eaton. 8°. pp. 715. Washington, 1872. Out of print.
5. ——— 1872. Eaton. 8°. pp. lxxxviii+1018. Washington, 1873. Out of print.
6. ——— 1873. Eaton. 8°. pp. clxxviii+870. Washington, 1874.
7. ——— 1874. Eaton. 8°. pp. cli+935. Washington, 1875. Out of print.
8. ——— 1875. Eaton. 8°. pp. clxxiii+1016. Washington, 1876. Out of print.
9. ——— 1876. Eaton. 8°. pp. ccciii+942. Washington, 1878. Out of print.
10. ——— 1877. Eaton. 8°. pp. ccvi+641. Washington, 1879. Out of print.
11. ——— 1878. Eaton. 8°. pp. cci+730. Washington, 1880.
12. ——— 1879. Eaton. 8°. pp. cccxxx+757. Washington, 1881. Out of print.
13. ——— 1880. Eaton. 8°. pp. cclxii+914. Washington, 1882. Out of print.
14. ——— 1881. Eaton. 8°. pp. cclxxvii+840. Washington, 1883. Out of print.
15. ——— 1882-83. Eaton. 8°. pp. cccxciii+872. Washington, 1884. Out of print.
16. ——— 1883-84. Eaton. 8°. pp. cclxxi+943. Washington, 1885. Out of print.
17. ——— 1884-85. Eaton-Dawson. 8°. pp. cccxvii+848. Washington, 1886. Out of print.
18. ——— 1885-86. Dawson. 8°. pp. xxi+792. Washington, 1887. Out of print.
19. ——— 1886-87. Dawson. 8°. pp. 1170. Washington, 1888. Out of print.
20. ——— 1887-88. Dawson. 8°. pp. 1209. Washington, 1888. Out of print.
21. Illiteracy, derived from census tables of 1880; Educational statistics, translation of article by Dr. A. Fieker; Virchow on schoolroom diseases; Education of French and Prussian conscripts. School organization, etc. pp. 70. (Circ. inf. August, 1870.) Out of print.
22. Public instruction in Sweden and Norway; The "folkehøiskoler" of Denmark. By C. C. Andrews. pp. 48. (Circ. inf. July, 1871.) Out of print.
23. Methods of school discipline. By Hiram Orcutt. pp. 14. (Circ. inf. November, 1871.) Out of print.
24. Compulsory education. By L. Van Bokkelen. pp. 17. (Circ. inf. December, 1871.) Out of print.
25. German and other foreign universities. By Herman Jacobson. pp. 43. (Circ. inf. January, 1872.) Out of print.
26. Public instruction in Greece, the Argentine Republic, Chile, and Ecuador; Statistics respecting Portugal and Japan; Technical education in Italy. By John M. Francis, George John Ryan, F. M. Tanaka. pp. 77. (Circ. inf. February, 1882.) Out of print.
27. Vital statistics of college graduates; Distribution of college students in 1870-71; Vital statistics in the United States, with diagrams. By Charles Warren. pp. 93. (Circ. inf. March, 1872.) Out of print.
28. Relation of education to labor. By Richard J. Hinton. pp. 125. (Circ. inf. April, 1872.) Out of print.
29. Education in the British West Indies. By Thomas H. Pearne. pp. 22. (Circ. inf. June, 1872.) Out of print.
30. The Kindergarten. By Baroness Marenholtz-Büllow, tr. by Elizabeth P. Peabody. pp. 62. (Circ. inf. July, 1872.) Out of print.
31. American education at the Vienna Exposition of 1873. pp. 79. (Circ. inf. November, 1872.) Out of print.
32. Historical summary and reports on the systems of public instruction in Spain, Bolivia, Uruguay, and Portugal. pp. 66. (Circ. inf. 1, 1873.) Out of print.
33. Schools in British India. By Joseph Warren. pp. 50. (Circ. inf. 2, 1873.)
34. College commencements for the summer of 1873, in Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, and Pennsylvania. pp. 118. (Circ. inf. 3, 1873.) Out of print.
35. List of publications by members of certain college faculties and learned societies in the United States, 1867-1872. pp. 72. (Circ. inf. 4, 1873.) Out of print.
36. College commencements during 1873 in the Western and Southern States. pp. 155. (Circ. inf. 5, 1873.) Out of print.

37. Proceedings of the Department of Superintendence of the National Educational Association, Washington, D. C. (1874). pp. 77. (Circ. inf. 1, 1874.) Out of print.
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CHAPTER I.

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I. EDUCATIONAL MOVEMENTS IN GERMANY.

The problems of the age, varied and intricate as they are, are all, more or less, educational problems. They certainly are reflected in popular education. School, like a vessel in harbor, is safe from the storm that rages on the social and political ocean, but it feels its effect in the slight commotion of the waves, and is rocked by the ripples in which the huge waves of the ocean terminate. This is found to be so

in every country where school education has become a concern of the State. Everywhere the schools are benefited or disturbed by changes in movement, new ideas, conflicting tendencies, or counter-currents.

In Germany, particularly, the demands of the time for educational reform¹ have become loud and urgent. The desired and partly effected changes in the elementary schools were clearly set forth in the last Annual Report. (See chapter entitled "Education in Central Europe.") Recently the secondary and higher institutions have become the subject of discussion, partly through the initiative of the Emperor, chiefly, however, in consequence of the enormous expansion of industry and commerce. A Berlin correspondent of the *New York Evening Post* sketches the commotion going on in school affairs in Germany by pointing out the irrepressible conflict between classical and technological schools. The article, signed W. v. S., is here inserted, with some omissions and verbal changes:

In the German conception of public school and higher education, and in the efforts to bring the concrete facts more closely in harmony with this conception, there has recently been remarkable progress, or at least change. And if one accepts the theory held by many educators the world over, i. e., that the needed and thorough reform of the present system of education must come in Germany and through German pedagogues, it may be truthfully said that the present time is rife with problems and bright prospects for their solution. After the truce which came on the heels of the Emperor's brief effort to effect a radical reform of the gymnasium (classical high school) curriculum and of the methods employed by the teachers there, the battle is now on once more, and the arena is already filled with the noise of the belligerents; the advocates of both technical and classical education are up in arms in behalf of their contentions.

One of the matters which Emperor Wilhelm, shortly after ascending the throne, first tried to arrange and reshape was this one of the old-fashioned German gymnasium education. That this was a step in the right direction was admitted then by the majority of educated men, but that the manner in making the attempt was not very successful also admits of small doubt. The result of the conference held in 1891 was to "ease up" the school task of the student, especially in Latin and Greek, to such an extent as to seriously interfere with the young student's proficiency in both classical languages, in introducing a spirit of unrest into the minds of both teachers and pupils, and in setting an agitation going which has never since stopped. This last achievement was, perhaps, good in itself. One other thing accomplished, and also to be commended, was the taking up of manly sports by the "gymnasiasts" and university students as a body, of rowing, football, lawn tennis, etc. The radical reform, however, that had been intended, has not been brought about.

Since then nearly ten years have elapsed. During that time technical and applied science has achieved triumph after triumph, and one important new invention after another has been introduced here and elsewhere. It is also well known what a strong interest the Emperor has taken in some of these; how, for instance, he received men like Roentgen, Marconi, Slaby, etc., and witnessed their demonstrations, and how he did everything in his power to further the standing and the interests of technologists. All this, of course, with the hearty disapprobation of the men of the old school in Germany, who continued to look upon chemists, engineers, electricians, etc., as a higher sort of mechanics, but not as men of science—certainly not as belonging to the "Ritter vom Geist"—not as their fellows in the aristocracy of intellect. That the average German "Gelehrter" has gone a good deal too far in this respect can hardly be doubted. Even such a prince of applied science as the late Siemens was, though he had attained wealth and recognition, suffered all his life from the thinly veiled disdain of the German university savant. And it must be remembered that in Germany the university-bred man thus far is the only one for whom the public service of the country is open; that he is the paramount power in German literature, journalism, almost every form of public opinion, and that, therefore, nonrecognition from that quarter has meant all along the shutting up of all the avenues through which men attain to glory, emoluments, popular esteem, orders, decorations, preferment, influence.

The battle cry was "Technical against classical education" throughout Germany for years, and the practical men with the technical education had generally

¹ See also notes under the head of Miscellaneous Items at the close of this chapter.

the worst of it, as they do not belong, as a rule, to the writers, and were too busy to reply to much that was said. One of the main objects the men of technics fought for all along was the title of "doctor," as conferred by the universities on their highest and ablest graduates. In a country like Germany, where the desire for titles and visible decorations is strong, and where not to bear a title of some kind or other seems to the average man one of the most serious misfortunes, and where people in their judgment of others are very largely governed by such titles, it meant, of course, a great deal more than in other countries that the young engineer, analytical chemist, architect, etc., no matter how thoroughly educated and how efficient and well-deserving, was under all circumstances debarred from the enjoyment of a title denoting academic degree and conferring social distinction as well.

It was here where the Emperor in his capacity as King of Prussia again interfered in behalf of the technical men. To the displeasure of the whole Prussian official world and of the vast and influential body of university-bred men outside of it, he conferred on the three Prussian institutions of technology in Berlin, Aix-la-Chapelle, and Hanover the right of conferring academic degrees, the only difference being that the "doctor-ingenieur" must be written and printed in German letters instead of Roman ones, so as to avoid misleading the public.¹ The Emperor did this, too, in a way to make this gift doubly valuable, and a large part of the German press has since been bemoaning the fact and expressing the direst fears for the future of the country. Nearly every university-bred editor or writer has flung Goethe's bitter sarcasm about the uses to which science is put, viz., "To the one she is the exalted, divine goddess; to another she is merely a good cow that provides him with butter," into the faces of these men of applied science, now his actual competitors in the race for honors, and the abuse heaped on the heads of the latter is still flowing undiminished.

New fuel was added to the flame when Professor Riedel, the rector of the Technological Institute of Berlin, delivered an address (see translation of portions of this address following this article) wherein he used the substance of a talk the Emperor had had with him and the other two rectors, and in which the present educational system of Germany, so far as it prepares for the universities, was severely taken to task, and the opinion expressed that a large share of what the pupils of the higher and secondary schools learns is, as a rule, useless, and that not enough regard is paid by the teachers and professors to the practical needs of life. The address went, of course, into details and furnished illustrations, but it was so powerful and well-reasoned as to produce a strong and lasting effect, all the more so when, in answer to the unceasing abuse showered on him, Professor Riedel publicly stated, probably with the Emperor's permission, that the phrases most found fault with had been used by the Emperor himself in the course of the conversation referred to.

In one of the leading German periodicals, the *Deutsche Revue*, Professor Kaibel makes a strong argument from the point of view of the university man against the Emperor's attempt to put the graduates of the universities on a par with those of the technical institutions, arguing that this will aid greatly in destroying the last fragment of that idealism in the German character which has made the German people great in science, poetry, the arts, and which has already been sadly curtailed by a growing desire for merely material good. He, too, furnishes illustrations and examples, and there is undoubtedly a kernel of truth in what he says. But Kaibel commits the mistake of simply ignoring the undeniable shortcomings of the present German educational system, and of joining in the vulgar abuse of his opponents. Nevertheless, his article has caused a sensation, and all the conservative papers of Germany are reprinting it, many of them because in doing so they can take issue with the reform movement.

Even such a strong Government paper as the *Kreuzzeitung* takes delight in thus intimating to the monarch that he had better retrace his steps again, as he did once before. But there does not seem to be any prospect of his doing so this time. * * * The Emperor has gone in earnest at the task of carrying through this reform. He met with strong and determined opposition, the strength of which can be measured by the virulence of the press campaign against the technological institutions. * * * Meanwhile the sovereigns of Saxony, Wurttemberg, Hesse, and Baden have imitated him in conferring similar rights on the technological institutions of Carlsruhe, Dresden, Stuttgart, and Darmstadt.

That, however, the movement within the nation itself for a thorough modification of Germany's secondary and higher school system is gathering strong momentum despite the enormous opposition on the part of the conservative leaders of public

¹ See next article on "Necessity of technological education."

opinion here, there are many proofs. One is, that among the German pedagogues themselves the number of those insisting on a change is rapidly growing.

The idea among them finds more and more favor that it would strengthen German educational school methods materially if some of the English and American educational features were to be adopted, with a view particularly of arousing in the German boy and youth more of that indomitable energy, that self-reliance, and that practical sense in meeting and overcoming difficulties which have ever distinguished those two nations, and which are in large measure due to early inculcation at school, where the "try, try again" is taught even to the youngest. * * * No less a paper than the Cologne Volkszeitung, the leading Catholic organ in Germany, published a well-reasoned article by a German bishop wherein this was set forth at length and with irresistible logic. It is certainly strange to see such an article appear in the main organ of the Ultramontane party, but the fact does not detract from its significance. It is quite certain that the Emperor's programme will also make toward this same end, and there is, whether one may regret it or rejoice at it, a strong current within the German people of to-day trying to rid it of the national failings that have told against political and financial success in the past, such failings as indecision, procrastination, lack of practical sense and ruthless energy in the battle of life, and there is a growing conviction that these old failings are due in large measure to the dreamy, impractical German schoolmaster of yore.

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A conference of distinguished Prussian school men, called together by the minister of public instruction, resulted in the rejection of the plan submitted to it, namely, of arranging for a common course of study for all secondary schools up to the fifth grade, and a trifurcation into classical, technological, and commercial courses from the fifth to the tenth grade. The conference also rejected the plan of making English a compulsory branch, except in the two highest grades. The "technologists" throughout the Kingdom deplore the result of this second educational conference as not in line with modern thought.

Since then the Emperor, perhaps impatient with the slowness with which the teachers and other school authorities moved in the matter so dear to his heart, has issued a new order, which is so significant that a translation is deemed desirable. The order reads:

After examining the report concerning the reforms instigated by me in 1892 in the secondary schools of the Kingdom, I desire to see the efforts continued along the following lines:

1. With reference to the privilege of students of abridging their military service to one year, the three kinds of schools—the Gymnasia (classical high schools), Realschulen of the first order (realistic schools), and Realgymnasia (schools representing both tendencies)—shall be considered of equal value in general education, and only with reference to the fact that some higher professions require special preparatory education, which not all three kinds of schools can give equally well, shall a distinction be maintained in favor of Gymnasia. The extension of the privilege mentioned to the realistic institutions is intended to raise their importance among the people and to extend the amount of realistic and scientific knowledge.

2. The recognition of the principle of equality of the various kinds of secondary schools will enable each to develop its own characteristics better. In pursuance of this principle I do not object to an adequate increase in the number of hours per week devoted to Latin in Gymnasia and Realgymnasia, but I lay especial weight upon the importance which knowledge of the English language has gained of late, and desire, therefore, that English be introduced as an optional study everywhere of equal rank with Greek. Where local needs would suggest, English may replace French as a regular study and French be taught as an optional study. It seems to me, also, very desirable to pay more attention in Realschulen to the study of geography.

3. Since 1892 the secondary schools have made unmistakable progress in various directions, but more must be done. I therefore urge upon the principals to remember "multum, non multa," and see to it that in the course of study not all branches be treated alike in importance, but that the essential be treated with due consideration and be taught more thoroughly. For the study of Greek it would seem desirable to abandon useless philological forms and pay more attention, besides the esthetic conception, to the causal nexus between the antique world and modern culture. In teaching modern languages especial stress should be laid on

facility to speak them, and securing comprehension of their classic writers. In the study of history there are still observable two faults: (a) The neglect with which important sections of ancient history are treated, and (b) the want of adequate lessons in German history of the nineteenth century, with its elevating accounts of great achievements for the fatherland. With reference to geography it seems best to intrust this branch to the hands of specially well-qualified teachers. In the study of natural sciences object teaching and experiments should claim more space and attention, and excursions should be resorted to to enliven the instruction; in physics and chemistry application and technique in daily life is to be more emphasized. With regard to drawing I desire that the ability of sketching objects rapidly be valued higher than heretofore, and in classical high schools it is urged that students who intend to devote themselves to technology, natural sciences, mathematics, or medicine make diligent use of facilities offered in drawing lessons. Aside from gymnastic exercises, the arrangement of the time-table should consider more than heretofore the health of students, especially by giving longer intermissions between lessons.

4. Since the institution known as "Abschlussprüfung" [an examination conducted after six years' attendance to enable students to abridge their military service.—Tr.] has not proved a relief, and especially has not relieved the throng to the universities, on the contrary, has rather increased the number of candidates for higher seats of learning, it is desirable to abandon the examination.

5. The establishment of secondary schools according to the plans adopted in Altona and Frankfurt has generally proved a success. [These schools begin with modern instead of with ancient languages.—Tr.] Their common foundation, which embraces the Realschulen, forms a social advantage not to be underestimated. I therefore desire that such attempts be not only continued where they have been tried, but that they be made in other localities also.

I entertain the hope that the measures instituted to realize the ideas expressed in the foregoing will find no obstacles among the teachers, in whose ever acute sense of duty and faithful devotion I trust, so that our secondary schools may benefit thereby, and the contrasts between representatives of the humanistic and realistic tendencies be lessened and terminate in a conciliatory spirit.

The educational press of Germany has not published much with reference to the Emperor's utterance, but the foreign press considers it as a very important state action and treats it accordingly. Inasmuch as French alone among the modern languages has been obligatory in former days in the classical schools of Germany, some journals in France have seen in the Emperor's advice a thrust at France.

The *Journal des Débats* (Paris) nevertheless says that the Emperor merely gives to English that increased importance which naturally belongs to it. This is also the opinion of the *Gaulois* (Paris), from which the *Literary Digest* takes the following:

At one time French was predominant as the language of diplomacy, of literature, of society. Perhaps it still holds its own in these respects. It is still the best medium for lively, graceful conversation; still the best means to express clearly all international agreements. But that only proves the value of French as an international means of communication in the aristocratic world. As long as the study of languages was the privilege of exclusive circles, nothing could disturb the supremacy of French. To-day the French language only shares in the depreciation of everything aristocratic. The business man rules the world, and the business man cares but little about the beauty of a language. It is the young merchant who tours the world nowadays, instead of the young gentleman who used to frequent courts and universities; and the merchant prefers the language of the people to whom he would sell his goods. We are not the most prominent nation in trade and colonization, hence the study of our language is less important than that of others. The crisis of the French language is not due to our social or literary decadence, but to our economic inferiority.

At present the business impulse is undoubtedly strongest in Germany. But the German has encountered the Englishman everywhere as a competitor. Germany finds England as England found Holland. The English learned the secret of trade from the Dutch, the Germans have learned it from the English. In this kind of struggle the nations at first combat each other, but they soon come to terms, especially if they are similar in race and language. The period of violent competition and enmity between Germany and England has been but short, nor has it been very critical. Its most prominent feature is the English regulation to

stamp German manufactures as "made in Germany," a measure which has not hurt the Germans, and is not nearly so full of animosity as Cromwell's navigation act. To-day the English and Germans have settled down to friendly competition. That, then, is the reason why the young men of the German middle classes, who are not intended to become cavaliers nor men of the world, but business men and industrials, are advised by their Emperor to learn English rather than French.

II. THE NECESSITY OF TECHNOLOGICAL EDUCATION.

[Extracts from an address of Prof. A. Riedler, rector of the Polytechnic Institute of Berlin.¹]

The demands made by present conditions of life upon education are different from those of former times, and they are determinative. Powerful forces and influences have changed conditions of life, and education, to be correct, must be in harmony with these conditions. Public education is not meant only to serve certain classes of society, but must promote national and political interests by stimulating productive activity. The causes, phenomena, and characteristics of recent demands upon modern education, in so far as they proceed from changed conditions of life, must be taken into consideration. They make the conclusion a natural consequence.

Present conditions of existence in connection with the great educational questions are, in the first place, characterized by an endless diversity in the growth of the sciences, which are, nevertheless, only at the beginning of an incalculable development. Whoever sees nothing more in this uninterrupted progress than an increase of scientific matter can demand nothing more than that every new scientific branch receive a new professor and new classes of students. Man will hardly live long enough, however, to be able to acquire all scientific knowledge; that is out of the question. As it is improper to develop specialism in school, so inconceivable is the thought of learning all that science offers.

There is but one way of meeting the constant development of science, using the term in its broadest sense, namely, by division of labor and an education calculated to effect self-reliance, utmost simplicity, comprehension of essentials, and a final absorption in or devotion to one branch of science. But that way is impossible unless the command of scientific principles is combined with their application. The thought of accomplishing anything at all by mere theoretical speculation is undeserving of the least attention.

As a further result of recent conditions of existence, I may say that the means of education at our command are much more varied than those of former times. Formerly, all known wisdom was contained in a book of written notes, and could be taught only from the teacher's chair. This point of view, though long since overruled, is still adopted in instruction and for educational means. About four hundred years ago Melanchthon taught theology, philosophy, natural sciences, and mathematics. In his time, however, theology and philosophy were identical; natural sciences meant a translation of Aristotle, and mathematics that of Euclid. Whoever had a knowledge of the dead languages was able to teach these studies.

In our own day much is proclaimed from the professor's chair as wisdom which is nothing beyond a knowledge of methods and scientific expedients, and neglects any consideration of modern educational means or the present status of science, i. e., the matter of education.

Modern educational matter and means² have become infinitely more varied than would be supposed from the scholastic method still in use. It is astonishing how ancient and antiquated forms are preserved and continue in vogue, as

¹ This is the paper referred to in the foregoing correspondence.

² It must be borne in mind that the author refers to secondary and higher institutions of learning. Whenever he uses the word school it is always in that sense.

though printing had never been invented, and wisdom emanated only from certain restra.

An immense overvaluation of erudition at present predominates in place of applied knowledge, to which no special significance seems to attach. The mania still prevails to treat all subjects historically, though history is often only a history of errors, and the young are tortured by these errors instead of being trained to clear judgments.

Technological methods in all departments of study are still too much underrated. These methods aim to give every branch of knowledge the simplest and most easily applied form of expression, together with the greatest clearness and most distinct arrangement. I beg leave to mention that university men are just beginning to reap laurels by applying technological methods which are familiar to us, but have until recently been ignored by the learned profession.

Another characteristic of altered conditions of life is the demand upon education for a different content (Inhalt). In former times efforts toward the highest education tended in one direction alone; they aimed at discovering an all-comprehending discipline (branch of study) for thought. This led to the most startling errors, especially in philosophical speculation.

To-day representatives of the natural sciences occupy the same chairs from which the infallibility of speculation was once preached. In juxtaposition to this there is the fact that true education must at the present day be inseparably connected with the consciousness that so called general education, as well as individual or special education, is defective (Stückwerk). He who fails to hold this view can not have an extended intellectual horizon. True education at present does not consist in the knowledge of many things, or in knowing what has been transmitted by learned authority, but in understanding the connection between different branches of knowledge and in a certain veracity of thought that appreciates the confines of cognition and judgment. By no means does it consist in a presumptuous belief in the infallibility of any single branch of knowledge.

For true education there is no other foundation than that of reality. The obstacle in the way of development of a correct mode of thought is the prevailing false training, mostly supported by dogmas which admit of nothing except blind acceptance. Take these dogmas away and the whole educational structure will fall. I merely refer, as an example, to the enormous overvaluation of language, or, more properly speaking, grammatical instruction.

A false professional preparation of the teachers for secondary schools also needs mention. Every candidate is trained in only one special branch. Instruction is but a reiteration of information, and a dead weight of facts instead of the recognition of truth is implanted in the minds of students—a school philosophy which it is well to forget as soon as possible.

Another great obstacle is the study for qualification,¹ in view of which many school plans are formed, as well as the acquisition of certificates of qualification, in the belief that their possession implies qualification and competency to govern and criticise, a belief that is fast gaining ground with modern youth. Study for qualification, remunerative support, or salaried position are cynosures for many.

Greater obstacles still are living examples; they exercise a stronger influence than words spoken or written. The worst example is the power of those who have no practical education and not the least notion of productive energy, and who exert their power to the greatest detriment of the ambition and love for work of those who really labor. In this respect a comparison with foreign countries, especially the United States, forces itself into notice.

¹ The author here refers to the examination which entitles the student to an abbreviation of his term of service in the army, and to other examinations which open the door to promotion and State service.

So far as the national spirit is concerned, Germany need not dread a comparison with America on many points. The Germans, the nation of visionaries, as they were called, were, in fact, an agricultural people until very recent times. With the development of technology they awoke to the consciousness of their latent power. The German nation has had reason to rejoice in a Christmas gift not granted by many centuries—the Thoughts and Reminiscences of Prince Bismarck. In this work a giant mind speaks to his nation, and his words contain an instructive force that will be felt in centuries to come. In these reminiscences we read that the progress of a nation is inseparable from a certain healthy egotism, to be controlled by necessity and never to degenerate into a spirit of domination or power. It is deplorable that we have no other word for egotism. It is a law of nature, like the struggle for existence, and has other than a derogatory significance. In the life of nations there is a necessary and commendable selfishness upon which their greatness is dependent.

All effort indispensable to the growth of a nation and to creative energy must proceed from a healthy egotism. It is necessary for national interests, as self-reliance and self-help can thrive on no other soil. God helps those who help themselves, and first in order come governments. At times demands are made upon governments which they can not meet, even with the best will and greatest resources at command. A healthy development is possible only through self-reliance and self-help.

The most significant part is played by the power of adaptability. Individuals as well as nations grow old and decrepit as soon as they cease to fit themselves to changed relations and conditions. No State can desire that. Every effort must be made to cultivate this most important faculty. The power of adaptability, connected with right knowledge, meets the probabilities of life. In life there is very little absolutely certain. Mere probability is a general rule, and it is self-evident that certain conditions can not be recognized at all, or only at improper times. In all practical problems the multiplicity of conditions acts as a restraint. The difficulty of the problems consists in managing the complexity of given conditions, together with their contradictions and opposing forces, that must be overcome and can be set aside by a corresponding power of adaptability.

Considering whom I am addressing, I need place no special stress on the fact that engineers find their chief difficulty and greatest problem in the aforementioned peculiarity. In no deed of engineering can calculations be made as exactly as in a mathematical problem. Every such act deals with a multiplicity of conditions, a whole series of probabilities. A proper consideration of probabilities and their valuation in the face of definite conditions is generally called speculation. This does not concern industry alone, but all creative activities, and most of all those that intend to govern, whether at the top or modestly in the ranks. To govern means to anticipate, not to decree. Whoever wants to foresee must know how to deal with the whole sum of probabilities that entangle practical life in intricate perplexity.

The further division of labor progresses, the greater the dependence of separate branches of knowledge one upon the other. That is an unavoidable consequence. One obstacle in the way of a correct comprehension of given conditions is the overestimation of knowledge, even technical.

Every creative agency has not its own end in view, but is a means toward definite economic purposes. Technical activity is only a part of all creative agency. Whoever understands building or other construction to be its own end makes a mistake. Professional narrow-mindedness that ignores the dependence of one branch upon others leads to wrong results.

The education of engineers of the future must therefore not be one partially false, but it must be an economic technological training. Every engineer who

wishes to be a creative agent must realize that he is a link in the chain of creative labor. The whole future, as a matter of course, depends upon this connection between technological creative agency and economic development. All instruction, especially that in universities, must conform to this tendency. The time has passed when purely scientific education meets all demands.

The present situation is still very unsatisfactory. All preparatory education excludes technological views and fails to meet demands. In the universities, even, the opinion prevails that purely abstract scientific qualification is all that is necessary. There are numbers of scientific specialists teaching in universities who have never gained any experience on their own responsibility, who have never themselves worked, and have no insight into the relations of present community life. Equipped with superficial (*oberflächlich*) knowledge, they are capable only to exercise criticism, and, in turn, only educate critics. I maintain that all school organization upon which men of technological education have no influence is very unsatisfactory. Even in technological institutions representatives of abstract or alien studies have the deciding voice, instead of professors in the appropriate line.

Another characteristic of the present is the decadence of authority. The influence of authority in every direction is weakening fast; not only the authority of the past, together with everything based upon it, but also that of the present, especially in social and political affairs. What was formerly solved in the simplest way by belief in authority is at present impossible. The result is irrepressible. It is the progressing democratization of all educational institutions, and this is accelerated by modern technical institutions. What was formerly exclusive has become common property. In education this fact is perceptible in the comparison of present public instruction with that of the old monastic or convent schools. Despite modernism and its numerous educational agencies, many efforts are still made to preserve untenable, outgrown institutions. There is much historical tradition in education, especially in classical schools, and generally in linguistic education. The contention concerning the course of study in secondary or preparatory schools is frequently based on false grounds.

If only the superiority of one or the other educational plan were to be proved, discussion on many points would long since have been decided; but the case is different. The old institution (the classical school or gymnasium) of verbal transmission of classic lore is defended, not in the interests of the subject, but for the sake of prerogatives or privileges connected with it. Other institutions would be considered equally good if they could only be imbued with the flavor of aristocracy; if they could grant privileges of qualification and were not within reach of all, and if they assured an exclusiveness favoring a growth of separate interests. Therefore I do not believe that the discussion which so often provokes heated argument will ever cease so long as it is based on the subject-matter. It is the struggle for privileges (private rights) that is carried on with such bitterness.

The ruling system of education favors language instruction, merely the forms of thought, too much; contents seem to be of secondary importance. This leads to verballity, shallow interpretation, and fruitless criticism. A consequence of the present educational code is that young men are not conscious of the importance of correctness of thought above mere form. He who masters the forms passes the examinations in school; he who fails in that is considered incompetent.

Unfortunately, instruction in mathematics is not much different from that of language. It is too independent of application. The unavoidable consequence is that young men attempt to solve all problems like mathematical tasks at school, and whatever can not be solved in this manner is simply neglected. Thus a belief is developed that everything can be solved with exactness. Mathematical formulas are applied, and real difficulties not to be dealt with mathematically, are evaded. The belief is strengthened that all scientific questions can be solved by

mathematics, and that everything we desire can be determined like the value of x in an equation. If conditions are to improve, the whole educational system must be permeated with a right technological view and mind, which is the spirit of responsibility and proper application. Teachers must not only possess more than a purely abstract education, but must be able to apply their knowledge; they must themselves have a mind for the treatment of probabilities and of errors; they must awaken the consciousness of errors. That will result in the consciousness of creative activity and the multiplicity of practical conditions; that mere power of criticism will lose in the game may be a great gain.

Furthermore, an instruction and a method are required that will develop qualities which a nation does not possess, and not those alone which are inborn in the people. That is our vulnerable point. Subtlety of thought and speculation are encouraged with us, while that which distinguishes other nations plays a very insignificant part in our education. Finally, as a matter of course, the fulfillment of these claims must make it possible to train pupils to a greater self-reliance in their work.

On account of privileges and prejudices, reforms always lead a fierce strife. History furnishes many examples to prove that institutions on the decline have been defended to the bitterest end. The struggle is always one in defense of privileges. Whoever attempts to inaugurate reforms for the development of suitable education by changing existing systems will always meet the strongest opposition, and especially the resistance of intellectual inertia. It is a law of nature like the passiveness of the masses; the resistance of the narrow-minded and the privileged leads to a hard struggle. This should not be fought for its own ends; it must have a well-defined purpose, which should be the right education necessary for national progress. I may here add that school reform is not the only thing to be accomplished.

Presupposing, however, the most far-reaching success, that purpose can only be attained by the cooperation of all factors, and engineers and other men of technological education must make every exertion to obtain recognition for their work and through their work. I regret to admit that this factor stands in need of much reform. The technical professional spirit leaves much to be desired when compared with that of law and medicine. Professional ambition is still too prevalent. Criticism is exercised on engineering feats by those who are not engineers. There has developed in recent years a mode of expert criticism in form of commissions, the members of which are anything but experts. It would do much good if we had such representatives as chambers of engineering, as merchants and financiers have in their chambers of commerce, physicians in their medical boards, etc. Engineers have no similar institutions; a mere association will not do.

There should also be an institution of the highest order and authority for technology. Universities do not answer the purpose; only an "Academy of technological sciences" would satisfy the want. The Prussian Academy of Architecture is no such institution, being only an auxiliary board, consulted by the minister of public works when it suits his purpose.

The defense of the profession of engineering also deserves mention here. Efforts toward that end are most significant, but have not always been well directed. The title "engineer" has been brought into such discredit that I do not think it can be generally raised at once; some time will be required for this end.

The drawback is that State secondary schools educate "engineers." The secondary, like all other, schools in Germany are managed by State governments, and I do not think all will relinquish the title without opposition. The Prussian ministry of public works has done much to bring the title of engineer into disrepute by granting it to those who have no academic higher education.

I believe, therefore, that the only practical means of defense for the profession is the degree of doctor. This degree has social value, is distinguished by tradition, and is an important and powerful weapon for equalization of the professions. At one time theologians alone held the degree, lawyers relieved them, and their successors in turn, down to chemists, encountered the distrust and opposition of the old holders of the privilege. I see no reason for engineers to follow a different course. They should conform to tradition, for in this case tradition bears the valuable testimony of a definite course of education, and attests the value of any new as well as the old accustomed courses. If the degree of doctor is granted to engineers, I consider the safety of the engineer's title guaranteed. It is hardly possible in any other way.

Confronted by the unavoidable contest, our question is, What practical and strategical means can be employed in the struggle? One way is to begin at the bottom and end at the top; to begin with schools and preparatory education, with the training of teachers, and subsequently give attention to the highest seats of learning. This way will arouse much opposition from people who have no comprehension for technological work, and it requires many decades of painful labor.

I am of the opinion that the right way is to begin the reform at the very top. We who possess a technological education must exert ourselves to make influential men understand our work and the necessity of promoting technological education. It is our duty to lead them to this conviction.

The greatest hindrance is found in the want of sympathy among our prominent colleagues, who, in the midst of their professional success, do not care to take the time or the trouble to interrupt their own great efforts in order to consider the difficulties of professional movements or to interest themselves in the mental grasp of the young.

Technological pursuits are already beginning to receive earnest attention. Technological universities are gaining recognition where they were formerly unknown. Even the old universities that made no effort to hide their contempt are beginning to grow thoughtful. Several of the erstwhile nonbelieving are, in fact, ranged on our side. One instance of great success is the establishment of laboratories on a large scale. One and a half million marks (\$357,000) have been appropriated for the department of machine construction in the Polytechnicum of Berlin. The South German States have followed this example. Wurtemberg has appropriated 1,000,000, Baden almost as many, marks for machine construction and electro-technological shops alone. The beginning has thus been made. Other institutions of technology will follow the example given. That the instruction is thereby based upon an entirely different foundation from that of former times is self-evident.

Another instance of success is the establishment of new technological institutions in different cities, as, for instance, Dantzic. The establishment of that school has been officially announced at the last session of the House of Deputies, and all political parties in the House voted for the necessary appropriation; the vote was virtually unanimous. The conditions in Dantzic present many difficulties. Education does not rank in the eastern provinces as it does in the western. The Government knows perfectly well that attendance in Dantzic will at first be poor; nevertheless, the institution will be established on a large scale as a full-fledged technological university. About the same number of teachers will be employed as at the polytechnic in Vienna; but there will be four professors alone for shipbuilding, and for machine construction there will be three more than in Vienna.¹

The establishment of a technological university in Breslau (Province of Silesia,

¹ This comparison with Vienna, Austria, is made by the author because he delivered this address to a congress of technologists in Vienna.—TRANSLATOR.

Prussia,) has been much discussed, but as yet there is no prospect of its becoming a reality, though conditions are favorable. Despite its necessity for the Province of Silesia, the representatives of technological institutions were called upon to oppose its foundation because of the movement to affiliate different technological departments with the old-established university. Such an action would be detrimental rather than encouraging to the development of technological sciences. Our professional studies would decline within the confines of a university. The necessity for technological institutions is so great that some more must be called into existence independent of universities.

Every German engineer will think of the Emperor with a feeling of intense gratification and sincere gratitude. He has shown the most astonishing interest in technology and has supported the interests of technologists with surprising sympathy. This has not manifested itself only toward marine engineering, but is also combined with a true understanding of technological sciences and a judgment truly remarkable. On different occasions technological institutions have been honored by visits from the Emperor. I do not know that any other higher institution has been similarly favored. The personal initiative of the Emperor in inviting three Prussian representatives of technological institutions to the Imperial palace is well known.

I also remind you of a powerful, though unsuccessful, initiative taken by the Emperor toward reform in the preparatory schools. The thoughts expressed at that time alone have the characteristic of truth. I refer to the fundamental idea of beginning with the study of the present time and its conditions and ending with the past. That idea should have been carried into effect in the schools. The first measures toward the foundation of a polytechnic in Dantzig is likewise attributable to the Emperor's initiative.

It is too late for us to enter into further details. I shall only acknowledge, with great satisfaction, that a strong, refreshing current is felt at present. He who maintains that the world has been divided, and that engineers, like poets, have fallen short, is unjust to us. The reverse is true. Engineers are indispensable to a new world and its new conditions, and I am convinced that engineers of the twentieth century will hold a more important position than lawyers of the nineteenth.

I shall close with Hutten's¹ familiar words: "Century and science! It is a pleasure to live, though we must not grow weary. Sciences and talents are flourishing now. Ancient barbarism, take the warning and seek another place of refuge." Barbarism, however, continues to exist. It is recognized in ancient formalities that must be overcome. Struggle there must be, but its issue will be a glorious future.

III. ART EDUCATION IN GERMANY.

[On the subject of education in art, Mr. W. von Seidlitz publishes in the *Deutsche Revue* of November, 1900, an article which deserves attention owing to its compact review of recent efforts in this direction in Germany. He uses the term art not in any restricted, but in the widest, sense, as embracing poetry, or rather literature, painting, and sculpture, the drama and music; he includes even industrial art. The essay is here reproduced in English, because it contains some valuable suggestions of what the German teachers do to foster art education.]

It is one of the signs of a new era when we hear of art education in contradistinction to general intellectual education and special professional training. Georg Hirsch, of Munich, may be said to be the first who brought this distinction promi-

¹ Ulrich von Hutten, 1488-1523.

nently before the German nation. In his *Ideas Concerning the Teaching of Drawing and Professional Art Education* (1887) he enlisted the attention of his readers chiefly to the education of artists. But in the same year Prof. A. Lichtwark read an excellent paper on "Art in school" before the Society for the Advancement of Pedagogical Science in Hamburg. In 1893 Konrad Lange, formerly professor in the University of Königsberg, now in Tübingen, published his book on *Art Education for German Youth*, which book served its purpose well, owing to its valuable suggestions. From that time on energetic efforts in behalf of education in art in German schools were made under the leadership of the teachers of Hamburg.

The question of art education does not, as a matter of course, refer alone to the education of children, but to that of adults as well. It concerns the great uncultured mass as well as educated people. The general object is to train the artistic sense, chiefly the eyes, of the whole nation, and this object is quite as important as the development of the power of thinking, which has been so exclusively emphasized heretofore. But though in the end the whole nation is to be benefited, it follows that a beginning has to be made in training the young. This latter, however, is possible only when the teachers are prepared for the purpose. Only through a proper training of teachers in art can the necessary conditions for successful art work among children be met. And this has been the German policy all along: For whatever new branch was introduced into the schools the teachers were prepared a long way ahead.

The movement in behalf of art education in schools did not originate in Germany, but may be traced to France and England, two countries which most energetically promoted art education of all kinds. In France, as early as 1880, the minister of public instruction appointed a commission to prepare the necessary measures for the purpose of introducing art into the schools. In England, several years earlier, the Manchester Art Museum had undertaken to provide elementary schools with good pictures, and since 1883 the Art for School Association is active for the same purpose. Now that Germany has joined the movement, it is confidently hoped that a strong impulse for the acceleration of the movement will be the result, for however much a so-called practical education is advocated during the last two decades, Germany is ever ready to stand in the front rank where the solution of ideal questions is sought. And such a question is under discussion.

Several points come under consideration: (1) The selection of juvenile literature; (2) the artistic preparation of picture books; (3) the artistic decoration of schoolrooms; (4) the reform of drawing instruction; (5) manual training; (6) the utilization of art museums for the education of the young; (7) theater performances, and (8) concerts for children. The teachers of the city of Hamburg so far have been the most active in all these directions, hence the results of their work and their publications deserve to be mentioned first of all, as pioneer work, so to speak.

Since the year 1893 the teachers' committee for the examination of juvenile literature has published a monthly, edited by Heinrich Wolgast, which paper has become a guide and adviser for German authors who are engaged in writing for children. The paper appears as a supplement to many educational journals of national reputation. Annually, in November, this periodical (*Jugendschriften-Warte*) publishes a list of books for Christmas presents which can be recommended by the committee, a body that has secured the utmost confidence through its thoroughly impartial work. In 1899 this list contained 168 titles, grouped for five different ages. The standpoint from which new juvenile literature is judged has been minutely explained by the editor in a book entitled "The Misery of Our Juvenile Literature" (second edition, 1899). He says, among other very pertinent

things, that books specially prepared for youth are of comparatively recent origin. Generally speaking, they made their appearance at about the middle of the nineteenth century. Books which are intended to express and represent an outspoken ethical, or at least an instructive tendency, promote hypocrisy and artificiality. Books which offer amusement in form of poetry and fiction without genuinely poetic contents destroy the sense of poetry and foster coarse "reading hunger." Among parents such juvenile literature is treated with indifference and utter want of judgment, and, moreover, such literature receives authoritative promotion through the existence of school libraries. Such consequences can be counteracted by the teachers only by energetically rejecting unfit books and by careful selection of what children read privately at home. The new school editions of selected works of the great poets; the works of such classic authors of juvenile books as Schmid, Horn, Nieritz, Hoffmann, and others; translations of American Indian stories and the numerous books of women writers who write for girls are carefully reviewed, and the latter with especial severity. Of Klementine Helm's *Backfisch's Leiden und Freuden* the editor says: "That which is the moral curse of middle-class people, the ever-recurring consideration of 'what will people say of it?' has been raised to a principle of life in this book." And of Emmy von Rhoden's *Trotzkopf* he says: "There is in the whole book not one full tone coming from the depth of conviction or emotion; all is shallow twaddle and superficial action." Of all recent German maiden writers the severe critics of the committee find only two who pass muster: Elise Averdick and Johanna Spyri, except that at times even they indulge in moralizing and obtrusive piety.

It is claimed that youth should be trained in the enjoyment of literature, hence books must be given them which will be read for the enjoyment they offer. Such books are stories of life, fairy tales, sagas, poetry; in short, books of poetic form and contents. Therefore Wolgast's review bears the motto of the poet Storm: "If you would write for the young, you must not attempt to write for the young." A juvenile book of poetic form and contents must be a masterpiece; but literary masterpieces belong to general literature, and hence specific juvenile literature has no right to exist. Prof. A. Lichtwark says: "Adults should be able to read juvenile books with the same, nay, even greater, interest than children." Education is deeply concerned in a common literary source for both adults and children. Though a poetic masterpiece may not be intended to instruct, yet it will always add to the capacity of understanding.

That the efforts to thus prune the literature offered to children do not find universal approval is plain, if we consider the unscrupulous manner in which such vital questions are still viewed by many careless parents and the thoughtlessness with which the science of pedagogy used to view them. As long as the majority of adults, educated people not excepted, are satisfied with the tasteless menu dished up by daily newspapers and family journals, they can not possibly evince either interest or comprehension of the efforts of the Hamburg teachers and will be satisfied when their children are brought up on a diet of Indian stories and "daughter albums and anthologies." Children who are thus fed intellectually will, of course, when grown up sink back into mere newspaper twaddle and read fiction indiscriminately. Thus the chain of cause and effect is made complete. Writers of juvenile books and contributors to superficial family magazines, spurred by a common interest, work into each other's hands.

The principle that juvenile literature should be selections from real literature deserves hearty approval. Did not Goethe, who for us is the representative of the entire culture of the past, collect his reading matter in that way? He plainly states that in his *Wahrheit und Dichtung*. Although the circumference of the literature from which juvenile reading matter can be chosen is small, owing to considerations of the field of children's interest, and morality as well as religious

feelings, yet it is beyond doubt that in time a long list of books, or parts of books, will be selected which have been overlooked heretofore, because the adult's interest alone was consulted. Various Hamburg family chronicles, printed for the Hamburg amateur library by Professor Lichtwark, offer distinct proof of the foregoing assertion. A particular difficulty for the commission appointed to examine juvenile literature arises from the adoption of the principle that all books having a purpose in view are to be rejected, let their object be patriotism or religion, however well they may be meant. Such severity easily awakens the suspicion that the efforts of the commission are directed against government and church. To awaken and justify confidence in this respect will require much patience and fine tact, but the ultimate success is sure to come. Things objectionably sectarian occur very seldom and must be rejected, but, on the other hand, the demand of the clergy to reject all expressions of liberal views, whether they refer to politics, religion, or ethics, can not well be granted without subjecting juvenile books, for adults as well as for children, to the Procrustean bed of religious dogmata.

That the efforts thus sketched, namely, the conscientious regulation of a definite field of education, meets certain dangers; that it must avoid extremes and narrow-mindedness is plainly seen from allusions in Wolgast's book. Thus it is of doubtful effect when art education is placed too prominently in the foreground as a specific part of instruction, while it should be the free growth of a natural but varied innate power, for which all that is required is proper opportunities, just as physical education is best fostered by offering opportunities for healthful exercise. Any specific influence for a purpose must be limited to a small number of occasions. Another Utopian idea is attempting to solve the problem of uniform people's education. It is admitted that "the kind of social struggle and the tempo of the development of civilization" depend to a large extent upon the literary education of the struggling parties, but any endeavor "to make the masses uniformly capable of consuming literature" will find its limits in the varied needs of the separate layers of society and in their differing modes and conditions of life. Among intellectually advanced families and groups, which will never cease to exist, a literary culture will develop that will reach far above the average.

By causing the publication of cheap editions of Storm's *Pole Poppenspäler* and Liliencron's *War Novels*, the Hamburg committee has performed a most meritorious service.

Professor Wolgast, in 1894, published another work in pamphlet form entitled "Concerning Picture Books and Illustrations." In it he points to the fundamental importance for intellectual development of impressions made upon the eye and mind during the first six years of life. He shows in examples of English and French artists, such as Walter Crane, Caldecot, Kate Greenaway, Boutet de Monval, that the simple and clear principles of the Japanese color print may be safely adopted. In Germany the classic illustrations of juvenile books by Ludwig Richter and by Pletsch, also the illustrations of Thumann in *Mother and Child*, deserve mention. But in this second work of Wolgast a few principal considerations seem to be doubtful. While he claims it to be the task of education "to introduce the child into the realm of thought and emotion of adults, i. e., of cultured people," we think it sufficient if for the healthy development of the child's own world of thought and emotion the necessary conditions are supplied. While he claims that the child is to be "systematically educated in the enjoyment of art," it would seem fully sufficient to restrict the teacher to causing enjoyment and suggestion by means of the mere contemplation of pictures.

In May, 1896, a historical exhibition of picture books and illustrated juvenile books was arranged in the art hall at Hamburg as a supplement to the meeting of the national teachers' association, for which a catalogue with preface was

printed. With this exhibition another was connected, that of pictures for the decoration of schoolrooms. Mr. M. Spanier published for this occasion a work entitled "Artistic Picture Decorations for the Schoolroom" (second edition appeared in 1900). In this work some historical allusions are made, from which we see that the first who advocated the æsthetic appearance of schoolrooms was Comenius, who said, in 1630: "The room should be bright and clean, and decorated with paintings." Though the exhibition was chiefly filled with charts, it may be of interest to quote a few opinions advanced by artists and collected in the second edition of the work mentioned:

Hans Thoma says, among other things: "Above all, I think it more important to suspend pictures in the schoolrooms than to be much concerned as to the selection of the pictures." He then goes on to say that he regrets "the disappearance of the coarse, but honestly good and original, mural paintings of former times and the substitution of common wood graining, stencil frescoing, or 'dead wallpaper.'" He argues "that it would be good for children if free-hand original colored frescoes would appear on the walls. Perhaps it might be well to oblige every artist who enjoys a State or other public stipend to furnish some work of his genius to be hung up for the benefit of the public. And what place could be better fitted for it than the schoolrooms of the people? However," he adds, "no jury of art professors should be allowed to spoil his joy in creating. * * * The subjects need not be sentimental ones, nor any that are intended to moralize or influence the mind. I should prefer simple presentation, 'painting as such,' for schools. Let us never forget that the paintings are to be merely wall decorations." It is obvious that the same principle that was followed in judging literature for children is here applied and advocated.

Max Liebermann writes: "Merely suspending reproductions of artistic paintings on the walls does not seem to me to solve the question. First, because a person who constantly sees the same reproduction for a whole or a half a year does not look at them any more; second, reproductions rarely ever produce a pleasing impression. But a pleasing impression should be given to the schoolroom, so that the pupils are unconsciously accustomed to require pleasing surroundings in their own houses in after life. Such a schoolroom might be made pleasing, aside from good, bright, cheerful light, by giving the walls a coat of paint of decided color. A simple straight line enlivens the whole wall; below it should be a deeper color (for reasons of cleanliness this may be of oil color); above it a brighter, but still decided tone, of color." The Hamburg teachers' association had the satisfaction, when this opinion was received from the artist, of referring to its own petition to the city building commission, some years previous, in which they had asked that the schoolrooms be painted with harmonious colors, in order that the æsthetic sense of the children be fostered. In that petition the sentence occurred: "The presentation of the beautiful demands no greater outlay than the presentation of the ugly."

Hans Christiansen (formerly of Paris, now of Darmstadt) writes: "It would seem advisable to arrange for a competition among German artists to furnish simple colored pictures for the walls of schoolrooms. I believe many good artists would enter such a competition, if for nothing else than for the good cause."

As was said before, France and England preceded Germany in the laudable movement of decorating schoolrooms. The Art for School Association, of London, founded in 1888, publishes annually several pictures, grouped in (1) historical pictures, (2) nature-study pictures, and (3) reproductions of master works. In 1897 the number of its published works had reached 460. This association annually lends or presents some of its pictures to schools unable to buy them. Many of the subscribers place their share of pictures for that purpose at the disposal of the executive board. The Manchester Art Museum possesses 240 collections of 12

pictures each (some of which are framed), which are loaned to schools. Well known are the colored Fitzroy pictures (the best of which are prepared by Heywood Sumner), which are used for decorating not only schools, but mission houses, hospitals, and similar institutions.

In France the normal schools are provided with paintings or reproductions for wall decoration. Among them are found German masterpieces, such as Dürer's *Melancholy*, Holbein's *Madonna*. Among the German pictures selected for French lycées three are engravings of Schongauer, four of Dürer, some paintings of Von Memling, Lucas van Leyden, six of Holbein. The artist Spanier may be right when he says: "I believe that there are still German normal schools which lack the funds to convince young candidates of the profession, by appeal to the senses, of the grandeur and splendor of our old German masterpieces."

In Antwerp, Belgium, a member of the city council moved an annual appropriation of from 3,000 to 5,000 francs from the city treasury to intrust talented young artists who have finished their studies at the art academy to decorate each artistically one or two rooms of the city schools, and thus make architect and painter work hand in hand to produce a harmonious whole. In Austria the large, effectful advertisement pictures of the various State railroads, illustrating the picturesque scenery of the Empire, are distributed among the schools for school-room decoration.

The Society of Hamburg Art Friends, which issues a yearbook (since 1895) and numerous reproductions, has recently undertaken a new issue of Holbein's paintings at 20 pfennigs (5 cents) each, and of Dürer's paintings at 1 mark (25 cents) each, for use in schools. At the aforementioned exhibition in Hamburg the large colored representations of English and French schools were highly appreciated; likewise Thoma's lithographies and Seemann's reproductions of mural paintings (at present more than 100). Attention was also called to the pictures of *The Nineteenth Century in Painting*, Spemann's Museum Collection, and the Copperplate Cabinet. A list of suitable reproductions for school decoration prepared by Mr. Spanier for the exhibition contains no less than 210 numbers. This list is very serviceable for schools. At Easter, 1898, a second exhibition of that kind was opened in Bremen.

From all this it is obvious that the subject of artistic decoration of schools is a field which opens opportunities for action, both for the parental care of the state and communal efforts. It is quite right what Spanier says: "When industrial people lack art education, i. e., taste for high art, the trades will suffer." Equally important is the point of view that "art should be introduced into the schools, but not the history of art." Here the influence of Lichtwark, who gave the first impulse to the movement in Hamburg and has since guided it, is plainly noticeable; in his *Exercises in Contemplating Masterpieces* (1897, 2d ed. in 1898) he gave the practical example for the method in which the sense for art may be awakened. When in some of the books on the subject such pedantic ideas are reiterated as "Every one has to be educated for the enjoyment of art," it is well to take them "cum grano salis," since nature has provided for it that the trees will not grow into the sky.

An especially weighty question is raised by a book by C. Götze, entitled "The Reform of Instruction in Drawing," which was published through the aid of the Hamburg City Teachers' Association in 1897. In this book it is set forth that drawing is a kind of play from which, if conducted well, the child derives a particular enjoyment; that the development of the power of observation is the main object and that technical skill is of secondary importance; that observation is the firmest and broadest bridge between nature and man; hence that instruction in drawing should be based upon observation of objects and their reproduction. Hitherto geometrical and ornamental forms have been drawn for years, and the

pupil did not reach the stage of reproducing natural objects until almost at the close of his school course, if at all. Now he advocates that the child should begin with it; for he claims that lessons in drawing and geometry aiding and supplementing each other are dangerous for the development of the æsthetic sense. It was Konrad Lange who recognized that the excessive emphasis given to the mathematical side of the work implied a pressing into the background of the artistic side, and that this was of great danger for instruction in drawing. Hence he concluded that the ornament resting upon geometrical forms should be banished as an object of drawing in the lower grades; likewise, all printed models for copying. Experience tells us that the geometrical and ornamental schemes are never found in original drawings of young children, say, under 10 years, while man and animal form the chief objects of their reproduction in drawing. The Englishman F. L. Burk quite agrees with this, saying that drawing is for the child a language for the expression of his ideas; the form, though simple and clear, enlisted only a small part of his interest. And H. T. Lukens says, "We may assume that it is easier for a child to draw with a few lines a characteristic sketch from memory than to draw after a visible object. Perhaps by requiring the child to draw from objects we make it difficult for him to produce the preliminary end, which is simplicity in outline." To judge from the foregoing it may be assumed that lessons in drawing should not begin before the tenth year of age. An apparently contradictory observation is that the pleasure in drawing diminishes between the tenth and twelfth years of life, but that may be owing to the rapid growth of the imagination at that age.

If, concerning the decadence of the power of observation, experiences of men who have a warm heart for æsthetic education are considered, the foregoing reasoning is deserving approval. Richard Schöne said (1878) in a lecture published in the Prussian Yearbooks: "When we see what it is that most persons among the well-educated class observe of objects, it must be acknowledged that this observation is restricted, as a rule, to that which is necessary to recognize things as such, or, in other words, to name them." And Alfred Lichtwark remarked in 1887: "The power of observation seems to be lost entirely. The main point in education with us lies in knowing. That lack is the breach through which alien things enter victoriously. Lowest of all is the state of education in the fine arts. For every hundred children chained to the piano at the age of 7, not one receives private lessons in drawing." In so far as instruction in drawing is considered an effective means for art education, Götze's dictum may be accepted, namely, that there need not be an essential difference between the work in drawing in elementary and in secondary schools. Drawing from nature, which was even advocated by Rousseau, will have the desired effect. In the course of study of the Hamburg schools the aim of drawing is expressed in these words: "The pupil is to be enabled to reproduce simple natural objects without coarse errors." This seems fully to meet the demands at the beginning, if we agree with Herbert Spencer that it is not a question whether the child furnishes good drawings, but whether it develops its inborn powers. How instruction in drawing is to be arranged only experience can teach us; the teacher's individuality will have to play its part, as heretofore. Whether the systematic study of child nature will lead to essential results in regard to the study of drawing is hard to tell, for from the samples of juvenile work exhibited in Hamburg nothing new could be learned.

A new field of activity was opened by the Teachers' Association of Hamburg in 1898, when it undertook to take about 8,000 pupils of the elementary schools to see theatrical performances. A pamphlet entitled "Our Elementary Pupils in the Theater," containing a number of contributions (one especially instructive from the pen of the indefatigable Wolgast), reports upon the manner in which admission to performances was managed and how the pupils were selected. At the begin-

ning of 1899 four concerts were arranged for school children of Hamburg, which were attended by 2,222 children. A pamphlet issued by the association reports upon these occasions, which have been duplicated since, in 1900.

The foregoing review shows in how many directions the promotion of art education in school is possible. Most important of all seems to be the decoration of schoolrooms. Since a beginning in this matter will naturally be made in large cities, the question may be taken into consideration how the treasures of art museums might be utilized for such purposes. At present the teachers of classical high schools take their students on vacation trips to renowned collections of sculpture. Why should not the students be taken to art galleries as well, to awaken the sense for the enjoyment of art, though not knowledge of the history of art? Above all, it is necessary to create a comprehension of the great importance of the question at issue, so that it may spread and be transformed into active and energetic enthusiasm, as is done in Hamburg, the pioneer city of this beneficial movement in Germany.

IV.—COMMERCIAL SCHOOLS AND COMMERCIAL UNIVERSITIES IN GERMANY.

[A review of recent movements in commercial education.¹ By Wilhelm Stieda.]

A period of most active competition has made success in mercantile business more difficult than ever before. It is therefore easily understood that merchants desire to acquire all the knowledge relating to their occupation. Twenty years ago an expert as well posted as Gustav Cohn could write: "Affairs will be as they were in the times of the Fuggers and Rothschilds; we can make money and be shining lights in the world of wealth with no other learning than reading, writing, and arithmetic."² These words can not be truthfully applied to the present. Since the systems of correspondence and transportation have so rapidly developed and economics are beyond their infancy, and advancing day by day, the conditions that govern trade are not so simple as they used to be. Many more possibilities and probabilities must be taken into account and judgment pronounced on many more suppositions. If the science of economics has afforded a clearer insight into economic movements difficult to understand, and if it can illustrate them more plainly, it becomes a necessity for anyone who stands in the midst of economic factors to learn their doctrines and test their application in business. In his address at the opening of the commercial university in Leipzig, Privy Councillor Carl Roscher said that the spirit of enterprise in mercantile business rests upon a peculiar combination of caution and venture, of comprehension of the whole and observation of detail, of versatility and perseverance, of adaptability to strange conditions and preservation of individuality. These conspicuous qualities, however, are not acquired exclusively by the practical teaching of business methods, but must be attained through scientific study.

When Prince Henry left for China, December 26, 1897, the Emperor emphatically declared that under the protection of the German flag German merchants and German science were to receive the recognition which Germany has a right to claim among the nations. In consequence, however, merchants must be prepared to cope with the puzzling questions of their calling and to maintain the prestige of German reputation and German education. The mercantile class itself is evidently most benefited by a thorough systematic education, including both theoretical and practical knowledge. Such an education is one of the most effectual means to prevent the growth of a mercantile proletariat dangerous to

¹ Published in *Jahrbücher für Nationalökonomie und Statistik*, vol. 19, Heft 5, May, 1900.

² Essays on Political Economy, 1882.

the interests of society and economies. The easy accessibility to mercantile business makes a too numerous class a ready possibility.¹

It is unfortunately true that other countries have for some time been ahead of Germany in technically commercial education. Though, as Bruno Zieger proves, a German, Paul Jacob Marperger, of Dresden, court counselor and counselor of commerce, drew the attention of the Saxon Government to this subject in a petition, 1715, and though in 1773 the idea was carried out in Leipzig by adding a commercial annex to the Nicolai High School, no even progress was maintained. For a long time the Commercial Academy of Hamburg, of world-wide reputation, was the only institution of its kind in Germany. While this institution remained a private enterprise, that declined after the death of its founder, Professor Büsch, foreign governments were more alive to the question and tried to gain an influence over the mercantile class by founding higher schools for them. France, for instance, succeeded in establishing a network of excellently organized commercial institutions with elementary, high, and continuation courses. In Austria, through Zehden's efforts, commercial education received a firm foundation by the establishment of the commercial academies of Prague, 1853, and Vienna, 1857. At present commercial schools of that country are divided into elementary continuation schools, high schools of two years' courses with a preparatory department, high schools of three years' courses, and a so-called university (Trieste, Revoltella Institut). In 1891, in Switzerland, a federal decree went into effect defining the relations between the Federal Government and existing commercial institutions and appropriating 60,000 francs to be used by the Government for the benefit of commercial education.²

England has by no means so neglected theoretical education in commercial science as that country's pronounced preference for practical measures misleads many to believe. Commercial science, of course, has not received the same attention that is given to it now. Besides seven high and elementary schools in London, there are a larger number of so-called technical schools in which commercial sciences are included in the curriculum. Apart from a three years' commercial department of the polytechnic institute in Riga, opened in 1868, the Russian Government has shown its interest in commercial institutes by a new ministerial order of 1896.

In Germany the Kingdom of Saxony alone, moved by the modern commercial spirit, has been actively and characteristically interested in commercial schools for the last half of the present century. The royal authority, the minister of the interior, has shown a deep interest in them, and as merchants themselves have spared no sacrifice, 64 of such schools are now flourishing in Saxony. Accordingly, there are 1.67 schools to every 100,000 inhabitants. In the adjoining Thuringian States, where there are 24 schools, the proportion is somewhat greater, being 1.80 institutions to every 100,000 inhabitants. According to late reports, the number of students in Saxony is 1,921, or 12.2 per 1,000; in Thuringia, 304, or 8.3 per 1,000 persons engaged in commercial study. In Saxony state support is proportionately greater than in other countries. During the fiscal year 1895-96 the Government gave a subsidy of 15,000 marks for the support of commercial schools. The fact must not be left out of account, however, that commercial instruction is given in continuation or supplementary and in technological schools, which likewise receive abundant state support.

Under these circumstances the forming of an association for commercial education is to be hailed with special satisfaction. Not fewer than 191 representatives of boards of trade, mercantile corporations, cities, and continuation schools met on October 4, 1895, in Brunswick to discuss the question of commercial education.

¹ Carl Roscher.

² See Annual Report of the Commissioner of Education of 1896-97, Part I, Chapter VI, p. 218.

That this congress was so well attended may be accepted as a proof of the universally recognized necessity for a change in mercantile education. At the same time the board of trade of Brunswick prepared a paper on commercial continuation schools, which was presented to the committees of the association and was later published as the second volume of the proceedings.

During the meeting in Brunswick, which was most interesting to all present, the desire was manifested that this first meeting should not be the only one. The resolution was passed to establish a union of commercial and continuation schools for entire Germany that should publish a professional paper. A committee was appointed to carry out the plan proposed. Dr. Stegemann was elected chairman, and the effect of the committee's work is the above-mentioned association, which has the purpose of developing an interest in and a comprehension of the importance of systematic commercial education among the mercantile class, as well as among governmental authorities. Its two meetings, held in Leipzig, 1897, and in Hanover, 1899, showed a marked increase in public sympathy. A fresh current of thought is pervading mercantile education, and the movement is felt in constantly broadening circles. The subsequent foundation of a German Institute for the Education of Merchants, under the patronage of King Albert of Saxony, is another encouraging sign. The institute, which has an annual state subsidy of 25,000 marks, is designated to afford poor merchants an opportunity of gaining a more complete education. The high patronage which it enjoys insures the full development of the national idea it represents.

A tendency to be encouraged in commercial education is the attention given to (elementary) commercial continuation schools and high schools. According to a statement of Mr. Schlossmacher, 60 to 70 per cent of those entering upon a business career annually are pupils of elementary schools; scarcely 15 per cent have attended high schools and hold certificates for one year's military service. This manifests the necessity of a continued course of commercial instruction in addition to that given in the lower schools. The disproportionately short term of study in commercial schools at present makes it very difficult, if not impossible, to be informed on all branches of trade. A theoretical education must supplement the practical. A two or three years' course with six to eight hours a week seems to meet present exigencies best. Professor Silbermann proposes the following course of study:

First year: Mother tongue, combined with commercial history, penmanship, commercial arithmetic.

Second year: Mother tongue, combined with commercial and banking knowledge; penmanship, combined with bookkeeping; arithmetic, combined with accounts.

Third year: Mother tongue, combined with economics; arithmetic, with double-entry bookkeeping; law and civil rights and duties, especially in their commercial relations.

French and English may be omitted in these purely elementary schools. Different opinions, however, prevail concerning the limits of this course. According to William Vortmann, principal of a commercial school in Mülhausen, Alsace, the study of merchandise (*Waaren-Kunde*) and commercial geography should not be omitted. When it is considered that the knowledge of merchandise is of the greatest significance to the merchant, and that commercial geography extends the intellectual horizon and helps "to make the mercantile office man a man of broad views," these studies claim a place of importance in the commercial continuation schools.

The question of compulsory attendance at commercial continuation schools is still an open one. The president of the chamber of commerce in Hildesheim, Director Schock, advised against compulsory attendance by general law, because

to make a school system uniform might perhaps be possible for a small state, but not for a whole empire. He recommended compulsory attendance by order of communal school authorities, on the ground that commercial education will not greatly advance so long as attendance depends upon the voluntary action of employers and apprentices. As paragraph 120 of the imperial commercial code gives communities the privilege of regulating attendance the proposition seems perfectly in order. This is the best way to surmount the difficulty of all theoretical discussion as to whether anyone may be compelled, beyond the elementary schools, to acquire an education which he himself does not consider necessary, or which he believes he can obtain in a different way. In all cases where compulsory attendance would imply coercion by means of the police force, students of advanced years, say beyond the elementary school age, should be left free to choose.

Commercial high schools and academies (called commercial colleges in the United States) have been proposed as a higher division of continuation schools in which young men, already actively engaged in business, may receive the proper education to meet their special needs. Even if the highest possible general education must be considered for those of the mercantile class, the same model is not equally appropriate. A shopkeeper, or any other retailer, does not need the same education as the merchant engaged in an extensive business or a great industrial plant, or as one who intends to travel in foreign countries. It is therefore advisable to give attention to the different needs of young merchants of unequal preparatory education and even to take local conditions into account—namely, in smaller cities a commercial school with an elementary course suffices for local merchants; in larger cities it would not be inappropriate to establish schools of a higher order that could afford young men¹ advanced instruction in single branches. The professional high schools—the title is of minor importance; any other may be chosen—should be open to practical merchants apart from their occupation in office or store. They are designed for those who have sufficient preparatory education to advance under direction, or for those who from any cause whatever have been prevented from benefiting by systematic instruction after leaving the elementary or secondary schools. For instance, a young man may have been obliged to leave the classical school on account of insufficient means or loss of health, and may enter upon a business career. An elementary commercial (continuation) school is inappropriate for him, and his means do not justify his attending a commercial college. Simple high schools that give the special instruction are just what such a case demands.

However, the preparatory education of a merchant is more important than his subsequent professional education. As was said before, practice in many cases is not sufficient to give a future merchant an adequate training. Employers are not always qualified and willing teachers and have neither the time nor the inclination, to initiate beginners. Night schools, and especially for those who have exhausted their best energies in business during the day, do not effect the desired result. When there is no solid foundation the kindest and most intelligent direction on the part of the employer will not supply all deficiencies, and even the most zealous beginner can not appreciate and assimilate all that comes within his reach.

Consequently, previous attendance at commercial high schools is to be recommended. They afford daily instruction in all commercial studies and in foreign languages. The curriculum includes all the branches mentioned in connection with elementary commercial (continuation) schools. Bookkeeping, correspondence, commercial arithmetic, study of merchandise, etc., all are thoroughly explained in their dependence upon one another. In this way students learn how to apply the suggestions given by their future employers and adapt themselves

¹ It will be noticed that the wants of young women are not considered in this line in Germany.

better and more quickly to the practical demands of business. Such schools may have a two or a three years' course. The conditions for admission should not be so low as to prevent their steady development. The same standard could be accepted as that which is set up for the higher grades of other secondary schools. As models for such secondary commercial schools may serve the public commercial institute of the merchants of Dresden, established in 1855, and the commercial institute of Leipzig, founded by a corporation of merchants in 1831, and maintained by the chamber of commerce since 1887. As soon as the elementary commercial schools become professional by introducing foreign languages and technical commercial branches, the commercial high schools become commercial universities.

An educational medium between the two schools and of great practical value, though not as yet generally recognized, is the model counting house. It is generally believed now that in commercial schools there is danger of losing the necessary touch with the requirements of practical business. The study of sciences alone does not develop the ability to enter upon actual business life. No knowledge of its inner relations is acquired, and commercial branches, if taught in a general way, are supposed to be no more than an incomplete equivalent, which gives no thorough preparation for a business career.

The model counting house meets these objections. As the chemist supports his studies with experiments in the laboratory, so the model counting house affords the commercial student the possibility of concluding scientific study in a business-like manner with a course of practical experience. Director Ahrens, of Prague, is the father of this idea on the Continent. Prof. Joseph Odenthal, of the same city, adapted and developed it and recorded his views and experiences in a book.¹ According to Richter, the course is so planned as to devote the first year to scientific preparation and the second to practical occupation. One hour a week is given to commercial study, another to correspondence, and a third to the work in the counting house.

In Romanic countries this arrangement is considered very practical. The international commercial congress, held in Venice in May, 1899, called forth a number of opinions on the subject. The model counting houses at the commercial colleges at Genoa, Venice, Lyons, and others are reported to be quite successful. The gentleman reporting about the Lyons school stated that students of the model counting house were never embarrassed in any case of actual experience. Quick in understanding the work assigned to them, they have been able to pass from one occupation to another without the least hesitation. In Germany, however, this innovation has met but little approval. Only a few commercial private institutions have followed this practical device in their plan of study. There are many reasons for this evident caution, and the opinion of Professor Adler² is no doubt very much to the point.

He maintains that elementary schools, though they be continuation schools, are not designed to turn out men perfect in practice and to prepare them by mechanical training for different technical branches. The purpose of such schools is to give pupils the best possible comprehension of the principles of their future calling, in general and in particular. Adaptability in actual practice is a natural outcome of an adequate technical preparation. Any imitation of practical experience in schools presupposes a certain restriction, while the very multiplicity of business relations is an important consideration; every business has its own peculiarities that can be learned in no way other than by actual experience. We do not mean to imply that the educational device in question has no value whatever; if it were annexed to a higher grade of schools it could be of great significance. In connection with commercial colleges and universities its importance can not be denied.

¹ The Model Counting House in Commercial Colleges, Leipzig.

² Atti del congresso internazionale, p. 557, ff.

Students of these are not as young as pupils of simple commercial schools, and having had a thorough preparation in mercantile affairs, they can benefit by the model counting house. Hence, in universities, especially, there is hope of realizing the idea with success. Weight attaches to the question whether theoretical study has been so perfectly embodied in form that the student understands how to turn its effects to practical account.¹ Adler believes that success depends principally upon the ability and discretion of the professor, as well as upon a small attendance. The division of work among the students should be regulated as in a business establishment—proprietor, bookkeepers, cashier, correspondents, etc. At the commercial university of Leipzig, the students of the fourth semester have comprehensive exercises similar to those of a model counting house. The importance of such an institute can be judged only from the result of the experiment; it was by no means unanimously approved during the congress in Venice. The next congress is going to discuss the subject again in the light of later experience.

No school reform in Germany has created a greater sensation than the proposition to establish commercial universities. Their necessity is no longer disputed. Privy Councilor Böhmert believes "that the question is perfectly justifiable, whether commerce and trade have not as much a scientific basis and may not be studied as scientifically, as horticulture and cattle raising or the construction of roads, bridges, houses, and machines." The idea is generally accepted, and foreign models are brought forward in illustration. In Paris there is the *École des Hautes Études Commerciales*, with the character of a university, which has occupied its new buildings on the avenue de la République since March, 1899. Founded in the year 1820 as a special school for commerce and industry, it remained a private institution until it was bought by the chamber of commerce in 1839, which body has since supported it. The expense of the new building was \$400,000, of which the city contributed \$120,000. In Antwerp, the *Institut de Commerce* is governed by the communal authorities, which contribute from the city treasury one-third of the expenditures regularly. The beginning of a similar organization was made in London three years ago. The chamber of commerce assisted in establishing a school of economics and political science, with which it is intended to connect a commercial university. The Export and Colonial Academy in Vienna, established by private enterprise on the same lines as the Austrian imperial commercial museum, was opened in October, 1898, as a kind of commercial university, with appropriations from the state exchequer.

As early as the year 1874 commercial universities were discussed during the framing of the new federal constitution in Switzerland. During the following years the directors of the Merchants' Union in Zurich, who turned their attention to elementary and secondary commercial schools, agitated the founding of a commercial university also, and appointed a special committee to arrange a programme of studies. A university of four semesters was planned, to be divided into the following four technical grades: Banking, railroad service, postal and telegraph service, and merchandise and manufacture. In 1877 a special committee was called upon to consider the question by a petition from the association of former students of the Polytechnic at Zurich. The point of argument was whether an independent institution should be established or whether a department of commercial sciences should be added to the Polytechnic in Zurich, as was done in Riga, Russia, and recently also in Aix-la-Chapelle, Germany. From the executive center of the commercial and industrial association of Switzerland, which realized the necessity of better commercial education, the addition of a special department at the Polytechnic was advocated. For a long time these movements remained too feeble to be successful, but they have been strengthened by the late agitation in Germany. The idea was first realized in the private com-

¹ See also account of practical work in Switzerland, p. 543, Annual Report of 1899-1900.

mercial academy under the patronage and direction of merchants, professors, and teachers of Zurich, which academy was founded October 1, 1895, through the efforts of Dr. Bertsch, the director of an international educational institute in that city. A municipal commercial academy and trade school was opened in St. Gall May 1, 1899, with about 10 students in the upper and about 60 in the lower division. A similar institution has been planned by the Merchants' Union in Zurich.

In Germany Leipzig and Aix-la-Chapelle have set a good example. In the former city a commercial university was opened in the spring of 1898. It is affiliated with the university and engages the same teachers. It is occupying the same buildings that had been used for over seventy years by the commercial college. To speak correctly, this college by extending its course and by entering into close affiliation with the Leipzig university has been made into a department of that university. Professor Raydt, the former principal, now acts as director of the commercial department of the university, and the professors of the university lecture in the new department as they do in the medical, law, and natural science departments. [Though at this writing, December, 1900, scarcely two years old, the new institution has proved its necessity; the classes are full and the students' attendance all that can be desired.—TRANSLATOR.] In October, 1898, a two years' course of commercial sciences was begun at the Polytechnic in Aix-la-Chapelle, Rhenish Prussia. In neither school are the studies compulsory. The lectures are proposed to the students and their attendance is optional. [Since this was written Hamburg has opened a commercial university, under the patronage and direction and with the liberal support of the great magnates of commerce of that city.—TRANSLATOR.] Free night schools for commercial men in Berlin, Frankfurt, and Mannheim are not well attended.

As in other cases of human experience, the proposition of establishing commercial universities is nothing new. Marperger, whose efforts in behalf of a commercial academy have been mentioned, referred to the subject in 1723 in his *Trifolium Mercantile Aureum*, or *The Merchants' Golden Clover Leaf*. The unpropitious times prevented the carrying out of his suggestions. Nevertheless, Professor Zieger's references to Marperger in his book, *A Saxon Merchant*, are very interesting, showing that he was one of the first, if not the first, to propose higher commercial education. Professor Roscher, usually a very generous critic, has pronounced an adverse judgment on Marperger. Still, if he does not occupy a prominent position in literature, the writings of Zieger place him in a more favorable light as a practical man.

The system (if this expression be admissible) of the old court counselor, Marperger, culminates in three institutions. He advises (1) a school for penmanship, arithmetic, and bookkeeping—that is, in a measure, a commercial elementary school; (2) a commercial academy, and (3) the opening of a department for commercial sciences in universities. Owing to Marperger's diffuse style, the editor of a later edition of the *Trifolium* has not published the whole work. He gives only certain passages verbatim, with critical notes, so that we can understand and judge Marperger's attitude on different questions of commercial education better than we could from a study of the original.

The commercial academy suggested by Marperger was designed to educate future merchants as well as to prepare official accountants. In essentials it was a novel idea, for even if it came in touch with existing schools for arithmetic and penmanship, its aim was much higher, being intended to give a thorough and extensive professional education on the very broadest basis without ever losing sight of the demands of practical life. The plan of study was calculated to give an insight into the actions of business intercourse, a knowledge of commercial law and the relations to centers of production, of merchandise and the modes of

transportation, and thus to cultivate an understanding for problems of economics and political science. To a certain extent the academy was to be the medium for transmission of commercial tradition and originate a theory of trade based upon experience of the past. The mental horizon of the students was to be broadened, their adaptability for practical experience awakened, and their observation quickened. The spirit of patriotism, which places general above private interests, was to be fostered above all things else.

In the same way the departments of commercial sciences in universities were to serve a double purpose. They were designed not only for merchants, but to give administrative officers their preparatory education. In so far as the academy served commercial interests by preference, these university departments were meant to give a thorough training to future Government officials, and especially to members of boards of trade. A commercial counselor, i. e., a member of the board of trade, must be "experienced by study, and especially well informed in political economics and commercial law, history, and mathematics; he should have traveled abroad and be acquainted with foreign languages and know the police regulations and commercial habits of foreign countries, as well as their geographical condition and their commercial and manufacturing status, the power and wealth of their inhabitants; moreover, he must have a practical knowledge of the origin of foreign merchandise and be able to compare it with that of his own country." According to Marperger, this is what a commercial counselor should be; and besides he should know a great deal in connection with special commercial questions. Consequently, the education which he thinks fit is by no means limited. In point of fact, however, he demands no more than what is expected of a modern man of administration—a knowledge of political economy.

If the necessity of a thorough commercial education seems therefore to have been thus early recognized, it is worthy of mention that universities at the close of the last century opened their doors to the disciples of Mercury. In 1787 Prof. John Nicholas Müller proposed the establishment of a commercial academy in Göttingen, which was a little more than an elementary school hardly in touch with the alma mater. In 1795, however, Professor Canzler advanced the project of an actual commercial department as an integral division of the university. Through Zieger's efforts the pertinent article entitled "The commercial education of certain students at German universities, especially Göttingen," published in the *Journal of Manufacture, Trade, and Fashions*, has been studied in recent times and republished. Since all the lectures to be attended by the commercial students were specified with the names of the professors who delivered them, and Dr. Canzler, at the close of the announcement, offered more detailed information, especially on the expenses of attendance, we may conclude that the arrangement was, for a time at least, in force.

In Leipzig the first German commercial university was opened at Easter, 1838. It was established by the chamber of commerce in union with the academic senate of the university, and receives annual subsidies from the city of Leipzig and the royal Government of Saxony. Any deficiency is guaranteed to be made good by the chamber of commerce. The salaries of the dean, or director of studies, and of the teachers of the commercial academy employed, rent, printing, and other expenses are paid from these sources.

The students pay tuition fees for the privilege of attending lectures. The salaries for lectures delivered by the teachers of the commercial academy (an old-established secondary commercial school, now used as the practice school of the commercial university) are fixed at 4 marks per hour; and, as a rule, the honorarium of university teachers does not exceed that amount. The lectures delivered within the halls of the academy are paid for by the students to the treasurer of the chamber of commerce; and as an entrance fee of 20 marks (\$5) is invariably charged,

the annual receipts from fees are considerably more than the guaranteed subsidies. The attendance fees of the university lectures are paid in full to the professors and lecturers through the treasurer of the university.

Prof. H. Raydt in the First Yearbook of the Commercial University, gives detailed information on the institute's organization, business direction, supervision, conditions of admission, order of examination, and other items. The conditions for admission deserve special mention. They were discussed at length at the meeting of the national commission of commercial universities during its sitting in Hanover, November 27, 1897, when the opinion was almost unanimous that no certificate lower than that given for the completion of studies in nine-grade secondary schools should be accepted. Professor Raydt and Dr. Soetbeer were among the few who opposed these as unconditional terms. The former maintained that anyone who possessed the general education required to hold a certificate of one-year military service (secured after six years' attendance in a secondary school), and had had some years' practical experience in business service would be able to understand the lectures in question. The other gentleman, in addition to what Professor Raydt had advanced, expressed the apprehension that the opportunity for merchants to acquire a higher education would be too limited if a graduation diploma from a secondary school were to be taken as a test for admission. In his estimation, those who had attended secondary schools for more than six years were no better prepared for commercial universities, since political economy and law, the chief commercial studies, are not included as preparatory studies in the curriculum of any secondary school, whereas a few years' practical experience would be an undeniable benefit to the student.

However, in principle the diploma of a nine years' preparatory course was adopted as a condition of admission at the commercial university at Leipzig; still, merchants who have won the certificate for one-year military service by having attended the preparatory schools for six years, and have completed their term of apprenticeship in business, are not refused admission, nor are they required to pass a test examination. The consequence is that two-thirds of all the students in attendance do not possess the diploma of graduation from a secondary school.

The milder judgment, therefore, has governed in practice, and the large attendance of those who possess no graduation diploma makes the necessity of this milder judgment evident. The benefit of advancement should most assuredly be within reach of the greatest possible number. Whether those who are not fully prepared for the lectures are able to follow them intelligently, experience must decide. A positive tradition will, no doubt, be soon formed by the mercantile class as to what plane of previous preparation will, in pursuance of professional study, promise the greatest advantage for the future. Anyone who has just completed his apprenticeship in business will of course find difficulty in following the lectures of university professors. His scholarship will be of little use to him, for the practice which he has had, since that time, will have weakened his taste and understanding for theoretical instruction. Instances will naturally occur where students will enter the university direct from the preparatory school without passing through any practical countinghouse or other business experience. Whether such a course is the best and most beneficial, and whether it is to be recommended, is an open question. It may be that in the countinghouse or ware-rooms much is learned that need not be known, or can be acquired in a short time. Generally, however, it is of the greatest advantage to a merchant to have served as apprentice for a certain length of time. But whether high-school graduates or not, the student of a university must be actuated by honest desire and zeal in order to overcome the difficulties that beset him in his studies. His own industry must overcome the deficiencies that he will realize in himself. The same energy which nerved him in the countinghouse and in practical work must urge him in

his studies. Whether much or little is assimilated will depend upon his attention, intelligence, and love of work. And if little of what is given to him by lectures or exercises strikes root, as deplorable as the case may be, the time devoted to study will not have been altogether lost. Therefore it is believed that the condition of admission should be simply this: That every applicant who has completed his apprenticeship and has led a blameless life should be admitted to the commercial university.

The curriculum received the closest attention from the regents of the university. Nearly the whole of the seventh volume of the reports of the national commission is devoted to the different opinions and programmes of study proposed. As there is a two years' course, it is believed that commercial studies should predominate. It will be hardly possible for a student 20 years old to give attention to his general advancement simultaneously in the four semesters allotted. Even students at the university who have as many years as the former have semesters will have the acquisition of a professional education for their chief end in view.

Accordingly, the precaution must be taken not to teach that for which the future business man will have no use, and which he can not acquire without neglecting for a time the necessary knowledge of his calling. The chief studies to be considered are political economy in all its branches, combined with economic and especially commercial history and economic geography, general technology, as well as commercial and marine law and law of exchange, and the principles of the civil code together with modern economic legislation. These are calculated to keep students busy during the four semesters. Only the most competent can master statistics, finance, jurisprudence, anthropological geography, ethnography, and other similar studies within the same length of time. If these studies are not condensed to meet the necessities of university students, they will do well to obey the advice given in the programme not to overburden themselves with lectures, as they are expected not only to take in facts, but to assimilate knowledge.

Some restrictions there must be, as commercial exercises and foreign languages can not be neglected. The curriculum of the University of Leipzig includes in the former correspondence and countinghouse work, commercial arithmetic, bookkeeping, extensive commercial exercises, mechanical technology of textile industry, and chemical technology. Too much stress can not be laid upon the necessity of these branches, which every business man must know. All that these subjects include affects practical experience, and is connected with the occurrences remembered from the days of apprenticeship. More difficult questions can be considered theoretically in universities than is possible in secondary commercial schools. Respecting such, it may be that the principal or employer had not the time to do for the student what would have been desirable for him in the future, or, perhaps, he was lacking general knowledge of the many-sided bearings of commerce himself, hence was unable to initiate the apprentice into the relations of business with affairs as they frequently occur outside of the countinghouse. In such cases, systematic instruction is especially beneficial, cultivating in the student who returns to practical work the ability to systematize what he sees and combine the teachings of theory with the treatment of practical cases.

At the University of Leipzig these exercises are arranged by the teachers of the commercial academy, who are four in number. Five teachers are engaged for languages, two for stenography, and one teaches typewriting.

It is characteristic of the Leipzig Commercial University that a final examination is considered advisable and has been introduced. At the meeting of the national commission of commercial universities in Hanover, November, 1897, one of the merchants present remarked that the mercantile class needs no official seal for the elevation of its profession; as Bismarck justly remarked, the desire

for it is a national fault of Germans. This assertion, made in a different connection, may be applied to examinations for merchants. It is difficult to believe that employers will prefer to fill positions with applicants who can show good diplomas. The chief test for appointment and position will most likely always be a recommendation of practical ability as apprentice. With the diploma as proof of having completed a two years' course at a commercial university added, any applicant will, of course, be received with greater favor. But why the test of an examination? The impression prevails that a kind of proof of competency is about to be smuggled into the free mercantile class.

It can not be denied that an evidence of students' efforts on the completion of their studies is in every way of excellent disciplinary force. The hope of being able to better their prospects by securing a high certificate will urge them to continuous zeal and any exertion which health, power, and ability permit.

As the case may be, if a final examination is to be held the order adopted at the Leipzig University must, on the whole, be approved. With one exception the compulsory subjects of study and hence of examination seem well selected. The train of thought sketched in the foregoing, which culminates in the condensation of subject-matter, has been likewise adopted in the programme of studies. Only it is doubted that it be right to place the study of finance on a par with political economy, and rest content with the outlines of commercial history and economic geography. The reverse would seem a better arrangement. Finance, or the science of the pecuniary management of a State, is interesting to a merchant, but so comprehensive an understanding of the subject which requires universities to devote four hours a week to it is hardly necessary. In the discussions of the national commission of commercial universities, which met at Eisenach, October, 1897, this standpoint was maintained, and it was unanimously decided to abide by an introduction or the outline of finance. The order of examination in Leipzig should therefore include no more, whereas economic geography and commercial history are considered studies with which a merchant must be thoroughly conversant. Consequently their entire text, and not merely their main features, should be taken into account in the examination.

The short term of existence of the Leipzig Commercial University prevents a just appreciation of its effects. The attendance, however, has been large beyond all expectation. Whereas the estimate or expectation for the first two years was 50 students, 244 were matriculated at the beginning of the third semester, to which a number who attend only special exercises must be added. Such an attendance manifests the urgent necessity for a more complete education among the mercantile class. And when we consider that men over 30 years of age—even 40 and 46 years old—do not disdain to devote their time again to theoretical study, we may well believe that the institution has made a reputation for itself. Prof. H. Raydt in his annual report expresses none but favorable comments on the students' conduct. He says: "The serious deportment of the students, their diligence, and the intelligence displayed in dealing with difficult subjects during school exercises justify the most sanguine expectations." The professional opinion is not less encouraging that merchants having a diploma of a six years' attendance at the preparatory school "have, neither by their deportment nor by any want of understanding of scientific exercises, occasioned the least scruple."

The opening of a commercial department at the polytechnic institute in Aix-la-Chapelle is less promising. No fault can be found with the students' deportment, for they manifest great interest. Many of the students of this technological university have attended the commercial courses; still the number of commercial students proper is small, being one-tenth that of the Leipzig University. The cause of this is not very apparent. Perhaps it is that the Prussian Government, although not opposed to commercial universities, has nevertheless extended no

direct patronage to the new institution. This circumstance may have contributed to the fact of the school's relative obscurity. It may be, too, that Leipzig has a stronger attraction for students than Aix-la-Chapelle on account of its more favorable geographical position. Still the conditions in Aix-la-Chapelle need not be looked upon in any pessimistic light. If the idea has been so happily realized in Leipzig, it will in the end also succeed in Aix-la-Chapelle.

Woman's entrance into public life in modern times has brought the question before the National Commercial Union as to how to provide for their proper education. From 1882 to 1895 the number of women employed for commercial work increased 70 per cent, in contrast to 35.8 per cent increase of men similarly engaged. It is no wonder, then, that associations have been everywhere formed to assist women in business and approve their preparatory education. Otherwise the just complaints that woman labor decreases the salaries of men could never be silenced.

Dr. Silbermann, the general secretary of the union, has written an article on the subject, and the annual meeting of the union, held in Hanover in 1899, discussed the question in detail. Silbermann reviews all the commercial schools and courses for women, as well as all the continuation schools (evening and day schools) open to them in Germany. They are found in thirty-two cities of the Empire, and have been established by merchants' associations, municipal administrations, women's clubs, associations for public benefit, and by private enterprise. But, as Silbermann states, the founders or directors of all these institutions, which exist under various names, have no clear idea of their end and purpose. The prevailing unsystematic diversity is not advantageous either for the girls and women employed in business or for the whole mercantile class, which is constantly employing woman labor to an increasing extent. Miss Agnes Hermann, in *Social Practice*, justly deplures that many families who intend their girls to be employed in business have no conception of their duty to provide them with an appropriate education. A six months' practical training behind a counter, or a three to six months' course at a so-called commercial school, better named steam press, is considered sufficient to launch them in the world as saleswomen or bookkeepers. The plans of the existing lower commercial schools for women correspond to such claims made by parents. The result is unsatisfactory labor and insufficient pay to saleswomen and women bookkeepers. Under such conditions there is no need of proving the necessity of reorganizing the education of business women.

Whether a compulsory attendance at continuation schools (schools open to children having completed the elementary schools at 14 years of age) should be required of women is a question that has not yet been decided. Silbermann is in favor of it, but the merchants' congress only admitted its importance, recommending earnestly that every urban community should establish commercial evening schools, with a course of study of at least two years, for women. State governments should be petitioned to see to it that employers allow the necessary leisure for a compliance with the legal obligation of attendance.

It is frequently claimed in Germany that a compulsory commercial education is especially necessary for women. It has been opposed on the ground that business is only of minor importance to many, and that they give up their positions as soon as they marry. Moreover, the fear has been expressed that the power of the merchants' union will decline if it is called upon to give attention to the education of women also. Besides, the opinion has been maintained that the influx of women employees is sufficiently great without its being increased by any outside efforts.

It seems, however, that it is to men's interests to make women competitors equally competent; for salaries are kept down just by those who have "picked up" their knowledge and have no special education worthy of the name. Men must to-day reckon with saleswomen, women bookkeepers, etc. It is therefore of

manifest importance that women competitors should be equally educated, so as not to force men under. Just because many parents think that their daughters' education can be restricted to the narrowest limits, and that they themselves are satisfied with modest demands and beggarly wages, compulsory attendance, as is required or contemplated for men, would therefore be most appropriate for women also.

What has been said makes it self-evident that commercial evening and day schools for women should be better planned. Silbermann justly asserts that the work of reform must begin with commercial schools now existing and with similar institutions which unscrupulously claim to "educate" hundreds and thousands of girls in six weeks or three months. That the mercantile class has so many incompetent members is due to them; and they explain, also, why a woman bookkeeper with a salary of \$30 a month displaces the man who receives \$50 a month or more. Well conducted, thorough commercial schools would attract competent and exclude incompetent students. There is no more grateful element than girls.

Separate institutions for women, in place of annexes to schools for men, are to be recommended for practical reasons.¹ The studies and terms of tuition must, of course, be identical; judgment could then be pronounced on the competency of women. "The purpose," in the words of Silbermann, "is, on the whole, the same, hence the means should not be different. It is to be hoped that merchants, mercantile corporations, chambers of commerce, and independent merchants' unions will understand this fact and act accordingly." From what has been said of the efforts of the national union in behalf of commercial education we may believe that Germany is following the best line of action to provide for the education of the future merchants of the Empire.

V. SCHOOL SUPERVISION IN GERMANY.

It is undeniable that the urban school systems of the United States are provided with more superintendents, assistant superintendents, and supervising principals than any school system in central Europe, although the rural districts of many States in this country lack efficient supervision, while in central Europe they are supervised almost as much, or as little, as the urban schools. That it is not thought necessary in Germany, Austria, and Switzerland to appoint supervisors and inspectors in such numbers as here, is owing to the thorough professional preparation of all teachers. No person can be employed as an elementary teacher in central Europe unless he have a certificate acquired in a State examination after four years' (in some German States six years) attendance in a normal school; and no one can be appointed to a position in a secondary school who is not a university graduate or has university and normal school training combined. This, naturally, does away with the necessity of constantly directing the teachers in their daily work, and hence the small number of supervising officers.

School supervision as organized in central Europe, particularly in Germany, is not well understood in this country, nor is it plainly set forth in governmental reports of those countries. It is therefore desirable to show the system of supervision as it exists in Germany. There the functions of a superintendent (inspector or school counselor) are, in the main, the same as in this country, only he has greater authority in questions of attendance of pupils and promotion of teachers. There is also a better division of responsibility and authority in Germany, as will be seen from a statement made by Prof. Theodor Franke, of Wurzen, Saxony.

¹ The Germans are not friendly to coeducation of the sexes

He describes the system of supervision of his State, and lays especial stress upon the importance of district or county supervision. The description he gives is essentially true for all German, Austrian, and Swiss States, for the differences found here and there are grown out of local circumstances and are not important enough to be here enumerated.

Prof. Theodor Franke's paper appeared in the *Oesterreichische Schulbote* (July, 1900, Vienna), and is here reproduced in translation owing to the comprehensive review it offers within a small compass. He describes the various grades of supervisory authorities in Saxony, their functions and their relations to the State school system. He says:

SCHOOL SUPERVISION IN SAXONY.

School supervision is an important part of the entire State system of education. Its character and organization is a proper standard of measurement for the whole system, and the more perfect and appropriate it is, the more the interests of education are promoted, and the better will be the results. School supervision in Saxony is divided into three grades, all of which have essentially different functions and authorities. They are known as local school supervision, district or county supervision, and State supervision.

(1) *State supervision.*—State school supervision is exercised by the minister of worship and education, a member of the King's cabinet. He is assisted by a professional school councilor, who is at the head of the ministerial division of education. Formerly, some teachers opposed the union of worship and education in the ministry as a recognition of the superiority of the church over the schools. It may be stated, however, that no such objection has been raised within the past ten years. During that period an advance has been made in teachers' salaries, the lowest salary for beginners having been raised from \$210 to \$300, and the highest salary of simple class teachers increased for the stipulated term of service from \$300 to \$525. It must be remembered, however, that besides the money paid in form of salary an extra sum is allowed for rent of house and garden, and that only the minimum salaries are fixed by law at the figures stated. Urban communities give much more salary as an inducement for the best teachers. At present a movement is afoot for a union among all the cities of the Kingdom to agree upon a definite limit of increase of teachers' salaries.

The minister of education represents educational interests in parliament, makes rules and regulations affecting the educational institutions of the State, prepares the annual budgets submitted to parliament, and acts as the highest court of appeal in cases of discipline of teachers. It is the general opinion that the State supervision is excellently adapted to conditions and most satisfactory to teachers. The high regard and deep affection manifested toward the professional assistant of the cabinet minister, Privy Councilor Kockel, is a proof of this, further substantiated by the fact that the minister has considered the repeated and well-founded petition of teachers to curtail the time devoted to instruction in religion, which was out of proportion to the time given to other branches. If, according to some, this curtailment is still insufficient, allowance must be made for the fact that in this regard the minister does not enjoy entire liberty of decision, being restricted by the Evangelical Lutheran Consistory. Nevertheless, the decreed omission of much memorizing of bible verses and hymns considerably lessens the burden for children, especially since the most difficult passages have been excluded.

(2) *Local supervision.*—Local school supervision is not the same everywhere in Saxony, nor for that matter in Germany. It depends upon the size of the community; it is partly professional and partly not so. The law of April 26, 1873, defines the following:

Local school supervision under State jurisdiction is exercised (a) over such schools as are superintended by a principal (called director) through him; (b) over such schools as have no principal (chiefly ungraded schools) through the clergyman who is a member of the school board, provided the State authorities do not revoke this commission or appoint a professional inspector. The office is a position of honor without remuneration. The local superintendent or inspector shall assist teachers in the fulfillment of their duties and acquaint himself with the condition of schools by personal visits, drawing attention to any faults he notices; comments disparaging to teachers must not be made during class or in presence of pupils.

The church exercises special supervision over religious instruction and the teachers of religion.

Professional local school supervision, therefore, exists for all graded systems of

school, i. e., schools that have principals or directors. Still as early as 1872 the desires of the teachers, as expressed in petitions to parliament and the minister of education, included more professional supervision. Before the passage of the school law (1873), the teachers of Dresden and Leipzig presented a petition for the abolition of ecclesiastical supervision even over ungraded schools.

There are no imperative reasons for any such request, complaints about ecclesiastical supervision are very rare, and when they occur the motives at bottom are usually personal. The complete abolition of such supervision amounts to nothing more than a question of increased honor for and appreciation of the teaching profession. This was accepted as a principle of action in parliament when the school law was under discussion. The committee of the lower house explicitly advocated the amendment which was adopted, that the supervision of public schools should, whenever possible, be intrusted to professional educators. No satisfactory arrangement to substitute professional for ecclesiastical supervision of ungraded schools has as yet been suggested; and it is self-evident that its abolition on the mere plea of some teachers, that the schools have enough supervision without it, is not to be expected.

It has recently been suggested that a change could be made without much attendant difficulty or any special increase in the expense. Local school supervision of ungraded (usually rural) schools could be intrusted to so-called supervising teachers. These could perform the duties of supervising several teachers as easily and efficiently as directors in city schools.

As no examination nor special conditions besides a certificate of middle grade is prescribed by law for superintendents in Saxony,¹ there is really no essential difference between supervising teachers and directors (principals), though many urban communities at present elect only those teachers as directors who possess an academic (university) education. As the State government exercises an influence over the appointments to the positions in schools without directors, it could also manage that only competent and worthy men should be selected to fill the office of supervising teachers exercising directive power under its orders. Danger to the uniformity of the system could thus be avoided, as progress is then the sure outcome of directive supervision. There would then remain only some rural schools, very far apart, having only one teacher each, to whom the position of supervisor could not be given for personal reasons. For these, small districts could be laid out and the worthiest and most competent teacher within a district could act as supervisor. This arrangement would give a commendable incentive to teachers to win the confidence and esteem of higher authorities and fellow teachers by commendable efforts and successful work. It would, moreover, be a powerful means toward fostering self-education among teachers. Just in this respect it is highly important that excellent teachers may have the prospect of a good position, even though it be unremunerative. At present there is no sign of carrying the policy of professional supervision into effect. As has been said, there is no imperative reason for immediate radical action, gradual changes seem advisable. Only the preliminary petition should be presented to give the State authorities the right to appoint the "directing" teachers at urban or village schools of several teachers to the position of supervising principal. In this way professional supervision would be gradually extended and the slow change from present conditions would avert all the evils attendant upon radical reconstruction of the system.

(3) *County or district supervision.*—The term district is not to be confounded with the American school district. A governmental district in Saxony is one of the political divisions of the State, hence it is rendered county in the following explanation. County school supervision ranks between State and local school supervision, and was likewise affected by the school law of April 26, 1873. Before that date clergymen fulfilled the duties of the office in addition to their own on their ministerial rounds of visits. Consequently, before the passage of the new school law there existed no professional supervision over counties. These conditions, which provoked just complaint, chiefly from teachers, were changed by the law mentioned. Ecclesiastical supervision was abolished, and the clergymen were relieved of their duties as school inspectors. Their places were taken by special county school inspectors, civil officers in charge of the supervision of the elementary schools without any further duties. They are appointed by the minister of education and receive a salary of not less than 5,400 marks (\$1,285), which is considerably increased according to the number of schools in their districts and age of service; some of these inspectors have a salary of \$3,000 per annum. They have the title school councillors, and this gives them the rank of fourth-class councillors in the State service. The law defines that they be selected from

¹ In other states of Germany supervisory officers have to pass severe examinations.

among teachers of good standing. Some have acquired the academic degree of doctor philosophiæ; nearly all possess an academic or university training, while a few have taken preparatory courses at classical high schools, and received professional training in normal schools. Most of them had, previous to their appointment as school inspectors, acted as principals of large schools. In many instances they were selected from principals of normal schools, high schools, and technical schools, very rarely from among elementary teachers. As a rule, the best known and most excellent men receive the distinction of an appointment to the district inspectorship. The large cities in Saxony place the principals of their city schools on an equality with county school inspectors as regards salary, so as to keep the best men in their positions. In almost every case principals of medium-sized cities are selected, apparently for no other reason than that most principals in large cities do not desire to accept the appointment.

Saxony is divided into 28 school districts, coinciding with the political districts. This uniformity is owing to the desirability of not duplicating the administrative machinery. Each county has its own school board, of which the inspector is in a large measure the executive officer, and this board is the authority over local school boards, hence is responsible for the administrative order of the system. This county inspection is differently managed owing to different political organizations among the districts. In cities where the so called revised municipal order obtains, the county government is not in force, hence city schools are not subject to county inspection exclusively, but the city council and county school inspector together form the authority. In cities of over 5,000 inhabitants the town council manages the business of schools, presided over by the burgo-master, or mayor, who must possess the legally prescribed education, and this local board is assisted by the county inspector. In all other cases, especially in rural districts, the school board consists of the county officers and the school inspector. The highest authority under the minister, naturally, is the governor of the county.

The members of the county school board agree upon regulations for the schools. In disputed questions the minister of state for education decides. All petitions addressed to the county board are first referred to the member who is a lawyer, who passes them over to his pedagogical colleague, the school inspector, for consideration and decision. The school board (board of county school supervision, as it is called in Saxony) is nonsectarian, and therefore independent of the influence of any religious corporation, and is the first authority over religious schools, where they exist, except the local board. This necessarily makes the school inspector the executive officer of the board, independent of ecclesiastical interference.

As the county board of supervision is also an office of legal authority, certain legal matters receive its attention, namely:

1. It attends to the execution of State laws and regulations that apply to schools.
2. It directs all negotiations for the admission and dismissal of pupils, and besides superintends, through its school inspector, buildings, rooms, and appliances, as well as the payment of teachers' salaries.
3. It makes all necessary investigations prior to the appointment of teachers, i. e., passes upon their diplomas and examines and confirms or rejects regulations proposed by local school boards.
4. Where no special authority for the purpose exists, it attends to the execution of the protective State law applying to irreducible funds and endowments.
5. It examines the annual county appropriations for school expenses, as well as the disbursing officer's accounts.
6. It forms a court of the first instance for disagreements on administrative questions and settles differences of opinion concerning tax levies for school purposes, and likewise approves or disapproves of petitions for State appropriations.
7. It decides all differences between the local boards and its executive officers, and settles all other difficulties arising in the school affairs of the district.
8. It manages all affairs of discipline with respect to the conduct of teachers, and is the agency for the first and second reproof. It likewise has the right to suspend teachers temporarily for a period not to exceed three months; the minister of education alone can discharge or summarily dismiss a teacher from office upon motion of the county board, which takes action upon motion of the inspector.
9. At stated intervals the county board presents its suggestions and reports for the improvement of external school organization to the minister of education.

When through any necessary resolutions and decisions the county school board comes in contact with church authorities, they act in concert. This usually occurs in appointing teachers for positions in parochial schools and in superintending the study of religion in all the schools. In matters pertaining to school hygiene the district or county physician who acts as health officer, and is a member of the county government, is consulted.

The business devolving upon county school inspectors as professional educators is of prime importance to teachers, as it affects the inner working of the school system. All public elementary schools in the county are superintended by the county inspector, as well as the course of study in so-called preparatory schools, attached to secondary schools, all kindergartens and schools for the defectives, together with the private instruction given to children of school age withheld from school owing to physical or mental defects.

Inspectors must visit all the schools under their charge at stated intervals and inform themselves of their condition. As a rule they should visit each school at least once in two years; according to discretion, oftener, especially where little progress has been made and conditions are less favorable; by so doing improvements can be suggested. The dates of the inspectors' visits are not specified by law or regular announcement, nor are they rigidly observed if announced. In larger districts with a full force of teachers it often happens that inspectors do not make a round of visits in four or five years. The apprehension, expressed by those who opposed the new order of affairs at the time of the abolition of ecclesiastical supervision, namely, that the inspectors would become a public annoyance, has proved altogether unfounded.

According to the present plan of supervision, the inspectors must give their attention to the following points:

1. In the first place, they are required to ascertain whether the regulations concerning the admission and dismissal of pupils are properly observed; in fact, they are charged with the supervision of the working of the law of compulsory attendance. They require from each school a report of the number of children whose parents have different religious creeds than prevails among the majority; a similar annual report is requested stating the attendance at religious instruction of those children who are not members of the religion taught in the school. Before presenting the statement to the minister, inspectors add the necessary explanatory notes.

2. Their most important duty is to observe whether the diligence and deportment of teachers, as well as the discipline, order, and cleanliness of their schools, are open to censure or not. No opportunities should be neglected to advise, assist, improve, admonish, correct, and warn teachers professionally if necessary. In the discharge of these duties, the inspector must consider the standing of the teacher and the honor of the profession in school and community; those who willingly follow his counsel should have his unreserved support. During their visits, inspectors examine the class rolls to see that enrollment is not over the prescribed maximum, and investigate whether the books and official blanks are used as intended, and whether any weak-minded or neglected children who belong in special institutions and schools provided for them have been admitted. Where the diligence and deportment of teachers is open to censure, the inspectors are called upon to propose professional means of improvement. Generally they see to it that teachers present an example to pupils in conduct and intercourse, so that the schools may be in reality nurseries for education, culture, and piety. In particular, they see to it that strict discipline and order are maintained, to the exclusion, however, of all measures detrimental to the development of character or apt to destroy children's love and esteem for teachers and their love of study. Any unlawful exercise of the right of punishment is reprovcd.

3. The inspector is required to investigate whether the course of study is adhered to, and whether the method of instruction and the progress of the pupils realize expectations. Consequently they examine and approve of all itemized or detailed courses of studies for elementary schools and for continuation schools that come within the range of elementary institutions. These courses are submitted to the inspectors, and they have to see whether the requirements specified by State law are carried out in them. They are also notified of all changes in the grading of classes, which changes are approved or rejected by them.

With regard to the methods of instruction, the inspectors are commissioned to see that education develops moral character and will power, and that diligence and obedience are not the outcome of fear. Instruction must develop, as far as possible, all the pupils' inborn powers, so that no special preference be given to any branch of study at the cost of the children's all-sided development. With respect to religious teaching the inspectors act in unison with church authorities, whom they must support in the exercise of their rights whenever desirable.

4. The scientific professional education of teachers and their occasional supplementary occupations for pay after school hours are also subjects of the inspectors' attention. At least once a year inspectors call a meeting of all the teachers and principals in their respective districts. In their addresses they usually express their views on teaching and training, and endeavor to inspire teachers with renewed

and cheerful devotion for their responsible duties, while one of the teachers, in accord with the inspector, expounds a pedagogical or practical subject. During the discussion connected with the lecture all are allowed free expression of opinion. These county teachers' meetings accomplish their purpose and contribute a great deal toward maintaining friendly relations between inspectors and teachers, and calling forth mutual esteem and full confidence.

Inspectors exert a still greater influence over assistant teachers who have not passed the second or final State examination. For them they arrange conferences in which trial lessons are conducted, and the work done is criticised. Important publications on psychology and pedagogy are discussed, as well as sections of the school law; practical and theoretical suggestions are given, and the novices in teaching are in every way urged to a deeper study of didactics. Whenever occasion admits counsel is given on diligence and deportment, which proves an advantage for as yet untried and unformed character.

5. In the interests of educational progress, inspectors devote a great deal of attention to educational text-books and aids or devices, and to the arrangement of matters of instruction. The rural schools of Saxony are indebted to their untiring efforts for the gradual increase of educational aids and material for object lessons. Though they were powerless to give direct compulsory orders, they nevertheless exercised a controlling influence in defining the measure which requires that an annual appropriation must be expended in every school district for educational helps as a part of a school's equipment. Moreover, the continuous admonitions to negligent communities had a good effect. Unfortunately, at times even the most convincing proofs brought forward by teachers are set aside by school boards, and in such cases exhortation and persuasion on the part of inspectors gain the desired result.

As many antiquated and inappropriate educational devices were still in use when county-school supervision was inaugurated in 1874, a broad field of beneficial action in this respect was open to inspectors.

In respect to the old courses in study, the minister of education earnestly requested the county inspectors to examine them, remedy conspicuous faults, and abolish prominent evils, but refrain from any radical reconstruction on individual authority, as the State authority itself intended to define the principles of the course of study for all elementary schools in Saxony. As, however, this official course prescribes only the very lowest standard for ungraded elementary schools and is intended to further rather than forbid any special individual methodic application, each school is still charged with the duty to arrange a detailed course adapted for existing local conditions. The mere decree of a course of study from an inspector has, therefore, no legal value. If a common order for any one branch or an entire course were to be introduced in a district or county it could only be done by general consent. Until now very few efforts toward a uniform plan of study for all the elementary schools of one county have been made, and these were rather with reference to separate branches, such as reading and language. Even from a pedagogical point of view, a certain uniformity in regard to these studies is perfectly justified.

In general, uniform courses of study can not be regarded as beneficial or progressive. As a teacher at one of the national teachers' meetings pertinently remarked on one occasion, an inspector or supervisor must be a man of broad views and great foresight not to run aground on details. This assertion applies as well to methods as to courses of study. In truth, on their entrance into office most inspectors emphasize the fact that they recognize liberty in methods of instruction within absolutely necessary limits; unlimited liberty or license is not and can not be accepted or granted at any time. Liberty of method is just as indispensable and advantageous for devotion to the vocation of teacher as liberty of conscience and profession of belief are in religion. Even though attempts have occasionally been made to prescribe certain methods, it is noted with pleasure that such efforts have been discountenanced by the State authorities who vouchsafed the teachers' liberty in the choice of methods.

6. Inspectors are obliged to pay attention to the economic conditions of schools, especially to the prompt payment of teachers' salaries and the support of schools generally, as well as to the hygienic conditions and otherwise legally required provisions for the health and comfort of pupils. For these reasons they examine all local budgets and school-tax levies and are advised of any changes in the teachers' salaries. On all important questions concerning the improvement of the condition of schools inspectors endeavor to be in accord with the local school boards, so as to avoid disagreements between authorities and make possible appropriate organization and pleasant intercourse.

7. Finally, it is the duty of inspectors to superintend the official action of local

school boards. They are called upon by law to examine the minutes of all the board's meetings and have the right to notify the presiding officer to call a meeting at any time. On their rounds of visits they are obliged to see that the conditions of a permit for conducting a private school are observed and that the limits of their rights are not overstepped.

Inspectors must keep special registers of their visits. The result of their observations should be frankly communicated to teachers and principals, but never in presence of pupils. In graded schools the inspector may hold a special conference for the purpose. A brief written review of the condition in which he found the classes and the studies is entered in the school's journal over his signature. A condensed statement of the notes of each visit is arranged in tabular form, and at the end of the year a report of all the visits made is presented to the minister of education. In this report any bad conditions and serious obstacles to progress are stated and the proper means for improvement suggested. All county inspectors meet once a year at the capital of the Kingdom to discuss measures for the improvement of schools, the introduction of educational devices, necessary changes of standards, and other subjects affecting school interests. To these conferences the best Saxon teachers—men of recognized merit—are invited, often also school principals, who are justly looked upon as future inspectors.

The annual reports must state the standing of the schools within the district, the changes that have taken place in organization and the teachers' positions, as well as the condition and renovation of buildings; they must mention teachers who have either excelled in work and deportment or have not reached the required standard, as well as give an opinion on the action of principals, inspectors, and school boards. From these reports the minister of education is enabled to form a correct idea of the condition of the lower schools throughout the State and of particular schools that require his attention. Thus he can exercise beneficial influence in all directions as occasion demands. If during the year circumstances arise necessitating the minister's immediate action, he is to be notified at once. Inspectors must carry out special commissions on the part of the State authority and must acquaint teachers with all ministerial decrees. In this way they are intermediate factors between the supreme authority of the State and the teachers.

In all cases where the minister exercises the right of nomination of teachers, namely, for positions in places with fewer than 5,000 inhabitants, inspectors advertise the vacancies and examine the applications. In making the appointment three names of applicants are proposed to the minister of education, with the reasons for their selection. As a rule, the inspectors conduct a competitive trial of the three applicants, unless this is set aside by the local board. The taking of the oath and installation into office of permanently appointed teachers and principals also devolve upon them. While teachers are usually initiated by the local authorities or by the principal commissioned by the county inspector, the installation of a principal, as well as the dedication of new schools, is conducted by the inspector himself. Both events are celebrated by spirited addresses on educational topics. Substitute teachers are appointed without any action on the part of school boards. By the middle of February inspectors must notify the minister how many assistants will be required in respective districts at Easter (the beginning of the school year); they assign positions to applicants, which these may not give up without permission until the examination for eligibility has been taken. Assistants present their petition for admission to examination to the inspector, who examines them and adds his comments on the conduct, talent, etc., of the candidate before sending it to the State authority, the minister. The same course of action is pursued with petitions for admission to special examinations in gymnastics, drawing, and French.

All petitions for leave of absence pass through the hands of inspectors. Leave of absence for one day to three days can be granted by the local school inspector according to his discretion, although the county inspector must be notified. The latter can grant leaves of absence for from four days to four weeks, while requests for a longer time must be sanctioned by the minister of education; still, the petitions must be presented to and approved by the county inspectors. These officials also approve of children attending other schools than those of their native districts, and give permission for children to leave school earlier than they otherwise could, i. e., before the completion of the fourteenth year of life and the satisfactory completion of the prescribed course. This last-named regulation, as well as that which defines keeping children at school a year longer because of their deficiency, is put into practice only in exceptional instances. Such a course of action redounds only to the advantage of schools.

Many county school inspectors are also royal deputies at the State teachers' examination for eligibility, and can thus exert an influence on the methods of conducting examinations. County school inspectors naturally have a great deal

of writing to do. This clerical burden is made lighter through the assistance of a secretary, otherwise they could not do justice to their purely educational work. In spite of the help they thus receive, they are only too often confined to their desks. From all this the necessity is easily recognized of appointing these supervisors or inspectors instead of leaving that work to be done by the clergymen, as was formerly done. For more than twenty-five years Saxony has enjoyed the benefit of county school supervision by officials educated in the profession of teaching, and advocates of the old order of ecclesiastical supervision of schools have made little opposition. It can not be denied that the progressive movement of education noticeable in Saxony since the foundation of the German Empire is due in part to this professional supervision, though it must not be forgotten that the teachers themselves have aided the movement zealously. Their petitions to the State authorities culminated in the reform of normal schools and the elevation of the purpose of public education. The excellent corps of teachers of Saxony is at present strong in the power of direction and application, and this is a powerful means to the highest possible end of State education.

VI. INSTITUTIONS FOR THE DEFECTIVE IN GERMANY.

[At various times the Annual Reports of this Bureau have given accounts of the systems of education prevailing in Germany; the elementary, secondary, and higher schools have been treated with all possible completeness, as far as statistics could give an adequate picture of the system. But it always has been difficult to give account of what is being done for defective children, statistical reports of such institutions being very rare. Prof. J. Tews, of Berlin, supplies the information in a review on pathological institutions (*Heilpädagogische Anstalten*) in "*Zeitschrift für Philosophie und Pädagogik*," vol. 7, No. 1. The article is here reproduced in English, owing to its accurate statistics.]

The following review of the pathological institutions of Germany lacks completeness in a few items. In no branch of our modern school system does the idea of searching out and nursing defective humanity express itself so purely as in these institutions. Children of five senses and children who are morally sound have been taught and trained with zeal and success for centuries, but it was reserved for our nineteenth century to lift to the level of complete development the poorest and wretchedest to whom nature had apparently closed the way to nobler culture and purer ethical training. In this department of education particularly, the Pestalozzi idea and Pestalozzi's devotion celebrate their highest triumphs. It is confidently expected that if the development of our civilization continues at its present rate the care for children of four senses, for mentally defective children, and those morally abnormal will gain in extent and be better adapted to the special needs of the unfortunate than is the case now.

Heathen antiquity got rid of human beings neglected by nature, and it was done in the most heartless manner, presumably in order to purify the species "*homo sapiens*" of elements diseased and weak. The present time pursues another method. We attempt to develop even the most imperfect germ, and firmly believe that in this way the human family in its totality will not only not degenerate, but will gradually be lifted to a higher degree of perfection in all its members, more surely than by means of the cruel method of the ancients. Yet, only recently a much-read educational journal contained the following sentiments: "I beg to state that our custom to preserve, by every possible method, the lives of crippled and diseased children is not at all to be recommended. Antiquity had in this respect undoubtedly better views than ours." This expression is prompted by a brutality not generally found among educators, and was characterized as such without delay.

Hand in hand with pathological pedagogy, of course, should go efforts toward improving the environments and conditions of life of those strata of the population, especially the poorest, which generally furnish the candidates for pathological institutions. If that were done, the number of defective children deserving of admission to pathological institutions would diminish gradually, as is noticeable already in the smaller number of blind children admitted to blind asylums. It is reasonable to suppose that other defectives would similarly decrease in number.

As the present generation in Germany has succeeded in reducing the number of beggars to a vanishing quantity by offering work for all, and by caring for the aged and infirm, it has also succeeded in withdrawing children of four senses and mentally abnormal children from public pity, and offering to them a possibility to equip themselves for the struggle for subsistence by means of associated charities and State asylums. The following review is almost complete for Prussia, but somewhat defective for the smaller States of the Empire.

I. BLIND ASYLUMS.

In connection with blind asylums the Prussian governmental statistics of June 27, 1896, give information with reference to the number of blind persons in the Kingdom. In 1880 there were counted 22,677 blind. Of these only 918 males and 786 females were born blind; 6,969 males and 6,875 females had lost sight after birth. Of 3,456 males and 3,673 females, a statement as to the time of beginning blindness had not been made. The number of cases of blindness has gradually decreased, partly owing to the progress made in ophthalmology, partly to the decrease in cases of smallpox, a disease which is a very frequent cause of blindness among children.

Number of blind persons in Prussia.

Year.	Males.	Females.	Total.	Of every 10,000.		
				Males.	Females.	Total.
1871	11,066	11,912	22,978	9.1	9.5	9.3
1880	11,343	11,334	22,677	8.5	8.2	8.3
1895	11,238	10,204	21,442	7.2	6.3	6.7

The decrease is obvious. Especially has blindness decreased among children of school age, as is seen from the following data:

Year.	Age less than 10 years.			Age 10 to 20 years.		
	Males.	Females.	Total.	Males.	Females.	Total.
1871	664	658	1,322	1,013	845	1,858
1880	572	488	1,060	992	823	1,815
1895	461	367	828	1,003	730	1,733

Hence, at present (in 1900) there may be between 1,450 and 1,500 blind children of school age. The number of blind persons varies considerably in the different provinces, the eastern provinces showing a higher percentage than the western. That blindness increases in frequency with age is a well-known fact. In the age from 0 to 15, for instance, there were, in 1895, only 4 males blind, but in the age from 50 to over 70 there were 105.3 in every 10,000 male inhabitants. The following

table shows the number of blind not yet 20 years old for the various provinces of the Kingdom:

Table showing number of blind persons of school age in Prussia.

Provinces of the Kingdom.	0 to 5 years.		5 to 10 years.		10 to 15 years.		15 to 20 years.	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
East Prussia	10	6	20	20	30	27	41	27
West Prussia	7	9	18	17	28	21	25	25
City of Berlin	11	8	14	15	16	16	21	20
Brandenburg	11	13	24	23	43	21	55	32
Pomerania	8	7	8	6	17	18	42	20
Posen	7	3	16	9	22	20	34	31
Silesia	31	32	37	22	58	46	95	46
Saxony	27	19	26	21	36	33	44	37
Sleswick-Holstein	10	5	9	9	18	18	20	21
Hannover	11	10	27	17	23	25	49	27
Westphalia	12	16	18	12	45	26	49	31
Hesse-Nassau	9	8	15	12	26	15	25	13
Rhenish Prussia	34	21	41	27	67	51	73	62
Hohenzollern							1	1
The State	188	157	273	210	429	337	574	393

There are 15 asylums for blind children in Prussia, in which 411 boys and 292 girls, in all 703 children, between 6 and 14, are taught. The following table gives the details:

Table showing number of pupils in schools for the blind in Prussia.

Institutions.	Pupils 6 to 14 years.			Number of teachers.		
	Boys.	Girls.	Total.	Men.	Women.	Total.
1. Königsberg	23	26	54	6	2	8
2. Königsthal	38	28	66	3	1	4
3. Berlin	29	22	51	2	2	4
4. Steglitz	73	39	112	4	4	8
5. Stettin	17	11	28	4	2	6
6. Bromberg	22	18	40	4		4
7. Breslau	25	15	40	5		5
8. Barby	33	31	64	5		5
9. Kiel	15	22	37	3	2	5
10. Hanover	22	20	42	3	3	6
11. Paderborn	25	9	34		2	2
12. Soest	14	11	25	3		3
13. Wiesbaden	17	7	24	2		2
14. Frankfurt-on-the-Main	7	3	10	2		2
15. Düren	46	30	76	6	1	7
Total	411	292	703	52	19	71

Of these 15 schools 13 were situated in cities, 2 in the country. One is a royal school, 11 are provincial, 1 is a municipal, and 2 are private schools. One is ungraded, 3 have 2 grades, 1 has 3, 5 have 4, 4 have 5, and 1 has 10 grades. These 15 schools have an average of 47 children, and the classes average 12.

The Kingdom of Bavaria has 4 such institutions, Saxony 2, Württemberg 3, Baden 2, and other States each 1, as is seen from the following tables:

Table showing number of blind children in asylums in the lesser States of Germany.

Institutions in—	Number of pupils.	Number of teachers.
Bavaria:		
Augsburg	(?)	(?)
Munich	59	10
Nuremberg	50	5
Würzburg	42	5
Saxony:		
Dresden	110	16
Leipzig	21	5
Wurttemberg:		
Heiligenbrunn	16	8
Schwäbisch Gmünd	86	5
Stuttgart	52	6
Baden:		
Freiburg	20	(?)
Ilvesheim	52	7
Hessia, Friedberg	21	6
Mecklenburg, Neu Kloster	43	10
Saxe-Weimar, Weimar	8	(?)
Bremen, Bremen	(?)	(?)
Hamburg, Hamburg	42	10
Alsace-Lorraine, Illzach	42	9

Altogether, Germany has 33 schools for the blind. Other countries, so far as information is received, are well provided with such institutions also. Austria-Hungary has 12; Denmark, 1; Russia, 23; Belgium, 5; France, 23; Spain, 12; Australia, 5; Switzerland, 3; Sweden and Norway, 8; Netherlands, 7; Great Britain and Ireland, 40; Italy, 14; the United States, 36.

II. INSTITUTIONS FOR THE DEAF.

Institutions for the deaf are more numerous in Prussia than those for the blind, simply because the number of deaf children of the age in which they may receive a school education is much greater. On December 2, 1895, the Prussian census found the number of deaf children of less than 20 years to be as follows:

Table showing the number of deaf persons under 20 years in Prussia.

Provinces of the Kingdom.	0 to 5 years.		5 to 10 years.		10 to 15 years.		15 to 20 years.	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
East Prussia	23	33	137	90	239	177	288	182
West Prussia	27	17	88	59	143	119	144	101
City of Berlin	15	14	45	38	65	51	67	65
Brandenburg	38	31	110	78	133	100	125	117
Pomerania	16	15	65	55	111	61	74	56
Posen	25	15	111	75	202	157	168	132
Silesia	46	26	155	136	243	202	334	234
Saxony	30	28	98	98	115	119	117	113
Sleswick-Holstein	11	13	49	42	54	46	45	53
Hanover	19	23	75	55	98	90	109	81
Westphalia	34	22	98	68	119	101	119	78
Hesse-Nassau	18	16	62	64	85	80	93	65
Rhenish Prussia	50	38	170	122	196	164	193	164
Hohenzollern	1	1				1	4	2
Total	366	292	1,263	980	1,808	1,468	1,820	1,493

Number of schools for the deaf in various countries.

Germany	98	Russia	13
Austria-Hungary	19	Spain	7
Switzerland	13	Canada	7
Belgium	11	Mexico	2
Denmark	5	United States	105
France	70	Brazil	1
Great Britain and Ireland	46	Argentina	1
Netherlands	4	Australia	5
Italy	35	Africa (Cape Colony)	1
Luxemburg	1	Asia:	
Norway and Sweden	17	India	2
Portugal	1	Japan	2
Roumania	1		

The schools for the deaf in Germany.

Location: City, Province, and State.	Year of foundation.	Years of course.	Number of teachers.	Number of classes.	Number of pupils.	Age of admission.
PRUSSIA.						
East Prussia:						
Angerburg	1833	6	14	12	138	7-10
Friedland	1893	3-4	4	3	39	11-14
Königsberg	1817	8	10	9	96	7-10
Königsberg (private)	1873	6	6	5	55	7-10
Rössel	1840	6	11	8	75	7-10
West Prussia:						
Dantzig	1873	6-7	3	4	30	7
Marienburg	1833	6-7	12	10	124	7
Schlochau	1873	6	13	11	132	7
Pomerania:						
Köslin	1861	7	8	8	93	8
Stettin	1839	7	8	7	80	8-12
Stralsund	1837	6-8	3	5	34	7-12
Berlin:						
Berlin (royal)	1788	8	10	8	77	7
Berlin (city)	1875	8	13	12	128	6
Brandenburg:						
Guben	1891	8	12	9	86	7
Weissensee	1873	8	4	3	36	6
Wriezen	1879	8	14	12	131	7-8
Posen:						
Bromberg	1872	8	9	8	77	6-9
Posen	1832	8	20	17	187	7-9
Schneidemühl	1872	8	14	13	111	7
Silesia:						
Breslau	1821	8	25	23	235	7
Liegnitz	1831	7	9	9	91	7
Ratibor	1836	6-7	27	24	290	7-11
Saxony:						
Erfurt	1822	8	8	8	77	7-12
Halberstadt	1825	8	8	8	81	7-8
Halle	1835	6-8	6	6	67	7-12
Osterburg	1864	8	4	4	37	7-12
Weissenfels	1829	6-8	7	7	63	7-10
Sleswick-Holstein:						
Schleswig	1787	8	15	13	137	7
Hanover:						
Emden	1844	8	4	4	32	6-7
Hildesheim	1829	8	10	9	93	7
Osnabrück	1857	8	9	7	68	7-12
Stade	1857	8	8	7	60	7
Westphalia:						
Büren	1830	8	9	8	76	7-12
Langenhorst	1841	8	10	8	78	6-10
Petershagen	1851	8	9	8	80	7-8
Soest	1832	7	9	8	65	7
Hesse-Nassau:						
Camberg	1817	8	10	9	95	6-8
Frankfurt	1827	8	4	4	34	7
Homburg	1838	8	12	12	124	6-8
Rhenish Prussia:						
Aix la Chapelle	1838	7-8	6	5	47	6-7
Erftl	1854	8	8	7	66	7
Elberfeld	1830	6-8	6	5	53	7-9
Alt-Essen	1878	6-8	6	5	58	6-12
Hutrop	1896	6-8	4	4	39	6-12
Kempen	1841	6-7	4	4	41	8-10
Cologne	1831	7	8	7	77	7
Neuwied, A	1854	6-8	6	5	45	7-12
Neuwied, B	1896	6-8	2	2	17	9-12
Treves	1819	8	7	6	54	7-8
SAXONY.						
Dresden	?	8	21	17	193	8
Plauen	?	2	4	3	33	6
Leipzig	1778	8	18	16	140	7-12
BAVARIA.						
Altldorf	1831	7	1	5	21	7-9
Ansbach	1881	8	1	1	2	7
Augsburg	1834	8	4	7	51	7
Bamberg	1855	5-6	4	3	23	7-10
Baireuth	1843	6	1	3	15	8-10
Dillingen	1855	8	7	4	52	7
Frankenthal	1825	6	7	6	63	7
Fürth	1874	7	1	1	5	6
Hohenwart	1878	8	4	4	48	7
Munich	1804	7	8	7	80	7

The schools for the deaf in Germany—Continued.

Location: City, Province, and State.	Year of foun- dation.	Years of course.	Number of teachers.	Number of classes.	Number of pupils.	Age of admis- sion.
BAVARIA—continued.						
Nuremberg	1832	7	4	4	38	6
Regensburg	1845	6	5	6	61	7-12
Straubing	1835	6	5	6	68	7-10
Würzburg	1841	7	8	7	92	7-11
Zell	1872	7	2	2	28	7
WURTEMBERG.						
Bönnigheim	1825	6-7	6	6	59	7
Gmünd, A.	1823	6-7	6	6	60	7-8
Gmünd, B.	1863	6	7	6	59	7
Heiligenbronn ..	1860	7	6	6	44	7
Nagold	1887	6-7	3	3	30	7-9
Nürtingen	1846	6-7	4	6	37	7-9
Wilhelmsdorf ..	1857	6	10	12	100	7
Winnenden	1823	6-7	5	4	29	6-12
BADEN.						
Dinglingen	1886	6	2	2	13	8-11
Gerlachsheim ..	1874	6-8	12	10	103	8-11
Meersburg	1883	6	12	10	93	8
HESSIA.						
Bensheim	1840	6-7	6	6	67	8
Friedberg	1837	6	7	6	50	8
MECKLENBURG.						
Ludwigslust	1840	8	8	8	66	7-11
Rostock	1888	7-8	1	2	11	6-9
ALSACE-LORRAINE.						
Isenheim	1886	7	9	7	52	7
Metz	1875	8	7	5	43	6-19
Ruprechtsau	1824	8	7	4	42	6-10
Strassburg	1885	8	5	5	36	6-8
SMALLER STATES.						
Brunswick	1828	8	6	5	50	8
Bremen	1827	8	4	4	23	6-8
Coburg	1835	8	1	4	20	6-7
Detmold	1841	6	1	3	13	7-9
Hamburg	1827	8	9	8	94	6-7
Hildburghausen ..	1843	6	2	3	23	7
Jena	1894	10	1	3	10	4-16
Lübeck	1826	8	8	8	124	7
Schleiz	1847	8	3	4	30	7-8
Weimar	1858	8	4	4	32	6-7
Wildeshausen	1820	8	3	3	32	7
Zerbst	1865	8	3	4	24	7
Total			721	670	6,596	

III. INSTITUTIONS FOR IDIOTS.

The care for weak-minded or mentally defective children and schools for their instruction have in recent years greatly increased. So-called "closed institutions"—i. e., asylums for idiots and epileptics—have existed for many years, but during the last few decades special attention has been given to other children who are mentally weak but not idiotic—children who can not possibly keep up in their studies with normally endowed children, and retard the progress of the school. Such children have been gathered either in special ungraded schools or separate classes. A number of German cities have proceeded to thus aid the weak and at the same time enable the classes or grades of normally endowed to progress at a more rapid rate in their studies. The following table gives the details concerning schools or asylums for idiotic and epileptic children in Germany.

On January 1, 1898, there were in Germany 59 of such asylums, with 11,964 inmates; 6,490 of these were boys, 5,224 girls. Of two institutions the number of boys and girls is not stated separately; only the total, 250. Of the total number, only 3,685 were capable of being taught. The others are only occupied with manual labor or only fed.

Table showing details of schools for idiots in Germany.

Location.	Date of found- ing.	Number of in- mates in 1898.		Inmates classified.			Teachers and nurses.	
		Male.	Female.	Taught school studies.	Only fed and nursed.	Only oc- cupied.	Men.	Women.
Alsterdorf	1850	333	241	121	187	266	63	55
Attl.	1876	95	62	52	42	63	11	17
Bischweiler	1874	11	1	10	2		3	
Blasewitz	1898							
Bremen	1892	169	7	139	25	12	10	25
Brückberg	1895		26	8	10	8		9
Burgkundstadt	1887	21	17	38		54		(?)
Cloppenburg	1881	119	67	186			15	22
Dalldorf	1869	96	53	100	28	6	9	22
Darmstadt	1888	29	26	38	14	6	4	8
Dessau	1869		155	44	111		2	23
Deybach	1873	42	18	50	10		21	
Dresden	1852	110	88	50	148		72	
Ecksberg	1868	144	128	46	93	179	22	23
Erkerode	1882	80	36	58	31	27	3	11
Gemünden	1859	181		84	39	58	22	
Gladbach	1846	243		162	29	52	22	10
Grosshennersdorf	1889	20						
Gotha	1861		40	15	10	15		5
Hasserode	1887	43	54		97		1	30
Heggbach	1879	194	202	50	346		54	
Himmlkron	1892		130	36	42	52	2	15
Holnstein	1881		76	18		58		11
Hutrop	1884	215	127	175	112		10	39
Idstein	1888	58	45	75		28	10	14
Irkerode	1894	72	44	83	5	31	6	8
Kattowitz	1862	40	27	50	9	8	3	9
Kiel	1863	450	275	130	695		64	112
Küchenmühle	1860	308	260	93	153	154	42	77
Kraschnitz	1862	399	277	209	219	248	43	82
Langenhagen	1881		93		64	29	5	15
Lauterhofen	1871	126	75	129	25	47	9	19
Leschnitz	1870	140	150	20	170	100	2	33
Liebenau	1879	141	106	53	76	94	18	20
Liegnitz	1893	179	171		305	45	34	28
Lübben	1847	101	49	36	53	60	40	
Marienberg	1893	70	36	92	14		3	12
Marienhausen	1880	85	55	70	50	20	11	20
Mosbach	1861	270	205	83	392		34	66
Neinstedt	1854		193	32	121	40	2	29
Neuendettelsau	1881	200	131	146	116	69	18	61
Niedermarsberg	1857		172	115	57		8	22
Nossen	1887	44	29	41	20	12	4	8
Oldenburg	1865	163		20	60	36	6	16
Polsingen	1865	230		(?)	60	(?)	23	
Potsdam	1865	178	128	104	173	29	14	13
Rastenburg	1886	13	12	10	15		1	5
Roda	1852	50	22	30	27	14	4	8
Schleswig	1849	272	171	108	89	234	47	103
Stetten	1870	175	98	78	94	101	29	38
Scheuern	1845	27	32	19	20	20	7	6
Schreiberhau	1867	59	55	73	28	6	10	22
Schwerin	1890	21	142	42	59	39	3	25
Sobernheim	1879	27	23	3	24	23	3	6
Sohland	1891	129			129		20	
Straubing	1893	46	28	60	14		8	14
Treysa	1884	412	341	127	123	386	8	140
Ursberg	1887	157	125	109	90	98	36	32
Volmerdingsen								
Total		6,490 (250)	5,224	3,685	3,196 (1,749)	2,892	611 (210)	1,191

Closely related to schools for idiots are the private institutions for intellectually backward children, of which there are a number in Germany, not included in the foregoing list. Some of these schools are designed for children of wealthy parents exclusively, and hence charge heavy tuition fees. Between the large group of normal children and that of pathologically weak (idiotic) children and degenerates there is another group who are hard to educate, being in danger of developing abnormally in physical, intellectual, or moral regard. Since 1890 Professor Trüper has opened a school for such children near Jena. Here children are instructed and trained with success according to the principles of neuro-pathology or psychopathology.

IV. SPECIAL SCHOOLS OR CLASSES FOR THE MENTALLY WEAK.

The number of institutions for the education of mentally weak but not idiotic children has greatly increased during late years. While in 1894 Prussia had only 16 cities in which provision was made for 700 such children, there were in 1896 as many as 27 cities maintaining 38 schools with 2,017 children. Such institutions are all within the city school systems; they are integral parts of the system; hence its statistics of attendance are contained in those of the elementary schools. These unclassified schools and classes are established for two purposes, (1) to give special aid to weaklings and (2) relieve the generally overcrowded classes of elements which would retard the progress of the average.

V. REFORMATORY SCHOOLS.

The first institutions of this kind in Germany were established by the Pietists during the eighteenth century. Men like A. H. Francke collected moral degenerates or children exposed to vicious influences. Pestalozzi continued this work of mercy and charity. Later on schools of refuge were established on a large scale by Zeller in Buggen (Baden), by Count von der Recke in Overdyk and Düsseldorf (Rhenish Prussia), and Johannes Falk in Weimar. While formerly orphan asylums and houses of refuge were combined, they are strictly separated in late years. Germany had, in 1897, 342 houses of refuge or reformatory schools, viz, 209 in Prussia, 20 in Wurttemberg, 26 in Saxony, 20 in Bavaria, 14 in Baden, 11 in Alsace-Lorraine, 9 in Thuringia, 9 in the three free cities, 4 in Hesse, 4 in Anhalt, 2 each in Mecklenburg, Oldenburg, Brunswick, and Lippe-Detmold. The total number of inmates in Protestant refuges approaches 10,000. The value of grounds and buildings is estimated at between 8,000,000 and 10,000,000 marks. The tuition fees vary between 75 and 600 marks per annum.

Through the criminal code (1871) for the German Empire and the law of 1878 concerning the care of neglected children a new kind of institutions has been recognized, to wit, institutions for obligatory training (*Zwangserziehung*). These are maintained by societies and subsidized by the State. Between October 1, 1878, and March 31, 1897, there were in Prussia 27,645 children assigned to such communal institutions. Other communities and provincial governments have performed their duties, imposed upon them by the law of 1878, by assigning children who have been found guilty in the police courts to private families, where they receive strict attention. Some communities who have no houses of refuge have made arrangements with institutions of other cities to receive their children convicted in court. In March, 1897, as many as 10,542 juvenile criminals were provided for in the various ways indicated, which cost the communities \$340,246.58 to maintain during the year ending March 31, 1897. In 1896 as many as 140 of these institutions had special schools for their inmates.

Table showing the attendance in schools connected with reformatories.

Provinces of Prussia.	Number of schools.	Number of classes.	Number of teachers.	Pupils between 6 and 14.			Per cent of all children of school age.
				Boys.	Girls.	Total.	
East Prussia.....	8	13	13	378	76	454	0.12
West Prussia.....	6	11	13	311	52	363	.13
City of Berlin.....	6	15	17	327	113	440	.20
Brandenburg.....	24	29	30	452	225	677	.15
Pomerania.....	14	21	22	337	107	444	.16
Posen.....	3	7	8	214	22	236	.17
Silesia.....	22	40	36	827	349	1,176	.15
Saxony.....	11	19	22	426	129	555	.11
Schleswig-Holstein.....	4	5	4	94	52	146	.07
Hanover.....	11	17	17	481	120	601	.14
Westphalia.....	9	14	17	443	150	602	.12
Hesse-Nassau.....	7	10	10	322	69	391	.13
Rhenish Prussia.....	15	24	29	736	169	905	.10
Hohenzollern.....							
Total.....	140	225	238	6,990	5,348	1,642	.12

Of these schools 95 had only 1 grade, 24 had 2, 16 had 3, and 5 had 4 grades each. The classes averaged 31 children. One hundred and twenty classes were exclusively attended by boys, 30 exclusively by girls, and 75 were mixed classes. Institutions which have no special school facilities send their inmates under escort to the city schools.

The kingdom of Saxony has 27 houses of refuge or reformatory schools, with 703 inmates. The expenditures for maintaining these institutions amounted to \$49,457 in 1897. To these should be added an asylum for children who have not been convicted in court, but were brought to this institution because they were in danger of becoming degenerates, the parents being in prison or irresponsible educational agents. This asylum is situated in Bräunsdorf and has 26 teachers, 11 classes, and 327 pupils (252 boys, 46 girls, and 29 advanced pupils the sex of whom is not stated).

Orphan asylums in Germany are not classed among the educational pathological institutions. The care of orphans is a duty of the communities, nearly all of which maintain orphan asylums; rural communities often place their orphans in private families. In 1893 Prussia had 78 orphan asylums provided with schools, in which 5,192 children were taught by 172 teachers. Wherever such schools exist they are not classed among the public schools.

VII. A NEW LAW CONCERNING REFORMATORY EDUCATION OF CHILDREN IN PRUSSIA.

[A law concerning obligatory education of minors has recently been passed in the Prussian House of Deputies (May 21, 1900). The circumstances necessitating obligatory education are found in social conditions over which no state government can have full control. A chief factor which, as a rule, is overlooked in judging depraved youth is found in the pathological conditions of the soul and in the education at home (or rather the want of such education), in school, and in public life—in short, in the diseased soul and its environment. This factor has not been taken into consideration by the framers of the law as much as was desired by persons who have made the saving of neglected and depraved children their business. The editor of *Kinderfehler, Zeitschrift für Kinderforschung*, sharply criticises the law as inadequate. Still, if compared with the laws on the subject in other countries, it would seem to go beyond the requirements in force elsewhere.

A careful reading of the law will show that the parental Government of Prussia concerns itself much more about the unfortunates than do other governments.

Of late German teachers pay much attention to pathological education, and it was to a large extent their wishes which were consulted in the framing of the new law. That some of them find it unsatisfactory is easily understood, for no law is made in advance of conditions to be combated. Law always lags behind. The text of the law is here given in English.]

ART. 1. Obligatory education, as the term is used in this law, is the education under public supervision and at public cost, in a suitable family or in an educational or reformatory institution, of minors exposed to evil influences or neglected and depraved.

ART. 2. In case of minors who have not completed their eighteenth year obligatory education may be enforced—

(a) If the presumptions of paragraph 1666 or of paragraph 1888 of the civil code exist, and such education becomes necessary to prevent moral depravity of minors.

(b) If a minor has committed any criminal act for which he can not be punished under criminal law on account of his youth, and if obligatory education is necessary to prevent further moral depravity because of the character of the occupation and the personality or other guardians, and the minor's special environments.

(c) If, aside from such cases, obligatory education is necessary to prevent complete moral ruin on account of the insufficiency of educational influence provided by parents, other guardians, or schools.

ART. 3. Obligatory education is enforced after the orphan court (Vormundschafts-Gericht) has decided upon the existence of conditions stated in article 2 in view of facts accepted as proved, and has ordered the enforcement of the provisions thereof.

ART. 4. The orphan court takes action, either on authority of office or upon motion. In rural districts the county mayor (Landrath), in urban districts the magistrate and the board of police, make the motion. These authorities have not only the right to submit such cases to the court, but it is their duty. Before passing decision the orphan court is required, as far as it is practicable, to hear the evidence of parents, legal guardians of the minors, and in all cases the communal authorities, the minister of the parish, and the principal or teacher of the school which the minor attends or last attended. If the court acts without previous official motion, its resolutions, accompanied by testimony, must be submitted to the local authorities (mayor, magistrate, and police board) for consideration before they can be passed. The decision must be delivered to the legal guardian, or to the minor himself if he has completed his fourteenth year of age, to the mayor, magistrate, and police board. An appeal may be taken immediately from the decision. This appeal has the power of postponing action.

ART. 5. In danger of delay, the orphan court can issue orders for temporary charge of the minor. In that case the police board of his locality must see to it that the minor is placed in an available institution or family. If obligatory education is eventually enforced all attendant costs must be borne by the communal authority (paragraph 14). If the court's decision is reversed the costs of temporary assignment are paid from the same funds from which the local police force is paid. In all cases the police board must advance the costs of a temporary assignment.

ART. 6. If parents or legal guardians have not been able to give their evidence, as required by paragraph 4, they have the right to demand a renewal of proceedings.

ART. 7. In so far as no specific procedure is defined in this law, the court procedure is to be conducted according to the regulations governing the optional jurisdiction of regular courts.

ART. 8. The legal proceedings are free of fees, and documents require no stamps; cash expenses must be paid out of the State treasury. Contracts for the charge of wards likewise require no stamps.

ART. 9. It is the duty of the communal authorities (see paragraph 14) to attend to the execution of a decree for obligatory education; they decide in what manner wards are to be brought up. Wards are delivered at the place of assignment by the police of their places of residence.

ART. 10. Wards must not be placed in a workhouse or public poorhouse; neither can they be placed in institutions for incurables, the deformed, idiots, deaf mutes, and the blind for any longer time than their physical or mental condition requires. For the fulfillment of obligatory education in cases in which action is pending in

court, wards may remain in their families subject to the supervision and recall of the communal authorities.

ART. 11. The communal authorities must make provision for the supervision of the education and care of any wards assigned to a private family. Women may hold the position as supervisor.

ART. 12. On motion of the communal authorities (having due regard for the regulations contained in article 78, section 1, of the law for the execution of the civil code) a guardian board selected from the directors of State reformatory institutions may be appointed for wards placed in the institutions for the reasons given in articles 2 and 3. The same applies to wards who, under the supervision of the directors of an institution, are educated in private families selected by them. If the supervision of wards is in charge of an official appointed by the communal authorities, he can, upon motion by them, be appointed guardian instead of the directors of the institution. No additional guardian can be appointed besides the one heretofore stated. The guardian enjoys the privileges allowed by article 1852, of the civil code.

ART. 13. Obligatory education is discontinued upon decision of the communal authorities, or upon motion of parents or legal representatives of minors, if its purpose has been accomplished or is otherwise assured. Discontinuance can be granted subject to revocation in case of necessity. Within a term of two weeks from the day of the deliverance of a negative decree by the communal authorities, a petitioner has the right of appeal to the orphan court, from whose decision appeal may be taken by the local authorities. Such an appeal has the power of postponing action. A rejected petition for discontinuance can not be renewed before the end of six months.

ART. 14. The provincial authorities in Hesse-Nassau, the county officials of Wiesbaden and Cassel, the State authorities of Lauenburg and Hohenzollern, as well as the city of Berlin, are required to institute measures in accordance with this law for the obligatory education of minors decreed by the orphan courts. They are required to erect educational and reformatory institutions, if there is no opportunity to place wards in families or in public, parochial, and private institutions. Provision must likewise be made for a proper home after obligatory education is completed. Suitable accommodation must be provided by those communal authorities within whose jurisdiction the place lies in which the court has acted as an orphan court.

ART. 15. Expenses which accrue from placing a ward in a family or institution and the cost of a first regulation outfit, as well as traveling expenses of a discharged ward, must be paid by the local directors of the poor where the ward resides; all other costs of support and education, as well as of the provision made on the completion of obligatory education, must be defrayed by local authorities. These receive an appropriation from the State amounting to one-half of their outlay, which sum, by agreement with the different local authorities, is paid regularly in average installments, or, where agreement exists, is fixed annually by the minister of the interior upon the basis of the previous years.

ART. 16. The communal authorities have the right to demand reimbursement of the cost of a ward's support during the term of obligatory education from himself and, when such action is impossible, from the person responsible for his support. The rate of payment is fixed by the minister of the interior upon hearing of the communal authorities. The costs of the general administration of obligatory education, the construction and maintenance of institutions erected by local authorities, is not herewith included. If any opposition is made to a demand for reimbursement the county authorities or the municipal council, upon request of the officials, have the deciding voice. Their decision is final, unless an appeal is sustained by a civil court. One-half of the amounts thus recovered must be handed over to the State.

ART. 17. Local authorities are required to draw up regulations for obligatory education and for the management of reformatory institutions established by them. Regulations concerning the admission, treatment, instruction, and discharge of wards must be approved by the minister of the interior and the minister of education conjointly. Private institutions may continue to comply with existing regulations.

ART. 18. The legal requirements concerning religious education for children in general are likewise applicable to the obligatory education defined by this law.

ART. 19. If wards of school age (6-14) can not be admitted into the public schools without detriment to the morality of other pupils, the authorities must see to it that the wards receive the benefit of instruction elsewhere during the term required for school attendance (6-14). Disputed cases are decided by the governor of the province.

ART. 20. The school supervisors or inspectors of city and county districts, and, in higher instances, the minister of the interior, are required to exercise superintendence over institutions designed for the reformatory or obligatory education of wards; they are therefore entitled to institute personal inspection.

ART. 21. Excepting cases that come under paragraphs 120 and 135 of the criminal code, whoever attempts to release a minor for whom obligatory education has been decreed, or tries to influence him against complying with the law, or is in any way accessory to his noncompliance, shall be subject to either two years' imprisonment or a fine not exceeding 1,000 marks (\$238), or both.

ART. 22. The minister of the interior is herewith charged with the execution of this law.

ART. 23. This law is in force from the day of its passage (May 21, 1900). At the same date the law of March 12, 1878, relating to the custody of neglected children, is annulled.

Attested by the minister of the interior:

FREIHERR VON RHEINBABEN.

REPORT ACCOMPANYING THE BILL.

The report presented with the bill when it was submitted to the legislature is deserving special attention on the part of pedagogical pathologists. It discloses a sad view of the growth of neglect and depravity of youth. The document reads:

The obligatory education law of March 12, 1878, owes its origin to paragraph 55 of the criminal code of 1871 and its first draft of February 23, 1876. It is restricted to neglected children, between the ages of 6 and 12, who have committed criminal acts for which they can not be punished on account of extreme youth.

This law of 1878 has proved insufficient to prevent the constant growth of criminality, neglect, and depravity of children. Up to March 31, 1899, the law had been enforced in 10,759 cases where children under 12 years of age were protected against further neglect and evil influences by obligatory education. But while neglected, though law-abiding, children under 12 and neglected children over 12 were left to themselves, and the latter were prosecuted only upon commission of crimes, criminality among youth has increased to such an extent as to threaten social order.

Article 56 of the criminal code, which grants judges the right to clear any minor incompetent to understand the culpability of his act and allow him the benefit of obligatory education, has had no successful result. Courts have made very little use of their privilege in this respect. According to the statistics of crime for 1896 (Statistics of the German Empire, new series, vol. 95, I, page 28), sentence against minors in cases of crime and violation of public law was pronounced in 1882 in 30,697 cases, in 1896 in 43,962 cases, in 1897 in 45,327 cases, showing an increase of 43.2 per cent and 47.3 per cent, respectively, since 1882. Investigations for the years 1898 and 1899 show a further increase.

Statistics prove not only an absolute, but also a relative, increase as regards the whole population. In 1882, from among every 100,000 minors between 12 and 18 years of age, 568 were sentenced by the courts; in 1896 there were 697, an increase of 22 per cent. This fact is the more serious, as the growth of criminality among adults during the same period shows absolutely 34.1 per cent, relatively to population only 16 per cent increase.

The kind of criminal acts committed by minors likewise deserves most earnest thought. Whereas the number of cases of theft during this period has remained approximately the same (among 100,000 minors there were 344 cases in 1882 and 340 in 1896, or 1 per cent decrease), the number of cases of serious bodily injury rose from 48 to 103, an increase of 112.7 per cent; judgments on the ground of compulsion and threats were trebled in number.

It is generally evident that increase of crime among minors is greater than among adults. How ineffective criminal laws have been to prevent increase of crime among minors is shown by the following figures: In the year 1896, out of 43,962 cases of minors tried in court, 7,191 were fined, 9,104 reprovved, and the remaining 27,667 were placed in custody. Of the latter, 62 were merely kept in houses of detention and the others imprisoned; 5,524 for less than 4 days; 4,921 for from 4 to 8 days; 6,851 for from 8 to 30 days; 4,560 for from 1 to 3 months. That any prevention of future criminal acts can not be expected as regards the 21,918 cases of imprisonment under 3 months is evident. Whether any better results can be anticipated in the 4,863 cases of imprisonment from 3 to 12 months is a matter of doubt. In general, it must be accepted that the time of 3 months to 1 year is too short to counteract criminal tendencies or remedy the effect of neglect

among minors. The 911 cases of punishment from 1 year to 2 years and the 287 cases of 2 years and over are the only instances that promise any kind of success.¹

The failure of these criminal laws expressed in numbers shows that depravity among youth is gaining ground year by year. Of 100,000 minors in 1889 there were 614 condemned to punishment; 93 had already been sentenced (58 once, 20 twice, 14 from 3 to 5 times, and one 6 times). In 1896 (seven years later) there was an increase to 702 sentenced, 132 of whom had been sentenced before. Of the latter 71 had been punished once, 23 twice, 24 3 to 5 times, and three 6 times and oftener. During the year 1898-99 26 per cent of the inmates of Prussian houses of correction were under 18 years of age. According to an examination made in 1894, as many as 9,489, or 53 per cent, of the 17,867 inmates of Prussian houses of correction had suffered the three forms of punishment by imprisonment (penitentiary, jail, and reformatory custody till the close of minority), and, what is more, of these several had been imprisoned for six months and longer; 8,789, or 93 per cent, were regarded as utterly unfit to associate with others, hence dangerous to society, and of these 84 per cent had been imprisoned before they were 18 years of age.

With the full knowledge of the lack of efficacy of imprisonment as far as concerns minors, all civilized nations have adopted the measure of replacing it by systematic education under State supervision (obligatory or reformatory education). Before criminal acts bring minors before courts of justice they are taken in charge as soon as any evidence of depravity, the precursor of crime, is noticed. Owing to present economic and social conditions, a much larger proportion of minors are occupied outside of homes, the influence of which was formerly a protection to them. Scarcely out of school, they begin an independent career of business and pleasure. Many rush into life uncurbed, dissipating the powers of body and soul. Ruined by evil companionship, they are tempted by others or follow their own bent unrestrained by force of will. In order to gratify often a most senseless desire, when means fail, the sins of lying, theft, and embezzlement are committed without thinking, and even burglary presents no horror. To satisfy unbridled passion, the worst crimes against morality are committed without scruples. In cases of resistance to public authority, tumult, or riot, half-grown boys usually form the largest contingent and are the most violent aggressors.

If what has been said refers chiefly to boys and young men, the want of reformatory education shows even a worse effect among girls and young women. The ones who go wrong among the young, some still at school and others immediately after leaving school, are constantly increasing. For certain reasons, girls of vicious habits under 16 years of age are placed under police control, and present legislation has devised no measures to induce or force them to change their evil life until they have fallen so low as to come under paragraph 361, article 6, and paragraph 362, article 2, of the criminal code. Little is gained by even such measures. The term of detention in the house of correction is usually too short for any beneficial result. Experience proves that a large, if not the largest, number of such women are hopelessly lost before their sixteenth year of age.

The statistics of houses of correction in Prussia show with what little success penal measures have been attended. During the year 1898-99 1,192 women and girls were inmates of houses of correction: 910 of these because of evil practices; all the others for begging, vagrancy, and being homeless, almost without exception led evil lives; 231, or 19 per cent, were minors, and 54 of these under 18 years of age; 296, or 25 per cent, had been sentenced to imprisonment before their eighteenth year.

Religion and education are the first agencies calculated and intended to remedy these serious moral and social evils. Religious influence particularly will do much to lead the erring back to a practice of virtue. Still it is impossible in all cases to remove minors from their harmful surroundings or lead them to suppress their innate criminal tendencies by subjecting them to educational influences calculated to improve soul, mind, and body. To give them in sufficient measure what their nature requires must be considered a high responsibility of the State,

¹The sum total, 27,667, mentioned first, does not tally with sum of the itemized cases, which foot up to 27,979.

The editor of *Kinderfehler* criticises the above conclusion, saying: "In this respect the views and experience of educators differ from those of the lawyers who wrote the report and framed the bill. Minors are seldom reformed in prisons and houses of correction; many, in fact, are only made worse. Sinners are reformed by a positive care of the soul; in other words, by true education. Other nations seem to understand this fact and act accordingly. The law in question, unfortunately, does not consider the full consequences of these experiences." (Compare: Monroe, *The Treatment of Criminals*; Grossmann, *How do Children Become Criminals?* Both articles published in *Kinderfehler*, 1898. Compare also: Yearbooks of the New York State Reformatory, 1898.) Still, encouraging concessions are made by the lawyers.

a duty of generous human charity, and an economic provision for the future welfare of society.

The report accompanying the bill then shows how, upon the ground of imperial laws, "nearly every one of the twenty-six separate States of the Empire has either changed or made more stringent its laws of obligatory education, or contemplates their reconstruction." That this is likewise necessary in Prussia, and that broader measures must be adopted in behalf of criminal, neglected, or depraved children can not, after all that has been said, be denied.

In considering reconstruction, three questions naturally suggest themselves: (1) What is the extreme limit of age of minors to be defined for obligatory education? (2) Who shall assume the responsibility of obligatory or reformatory education? (3) Who shall defray the expenses of such education?

In answering these questions the editor of *Kinderfehler* refers only to those points which are within the educational province and omits purely administrative questions. The document quoted states:

Obligatory education touches so closely the relation of minors to parents and family that in many cases a complete separation of minors from their families becomes a necessity. It should, therefore, be enforced only in the most extreme cases when all other measures at command of the orphan court have failed. However, the imperial law grants the right of option to State authorities, for it provides: Obligatory education can be enforced when criminal relations of parents or culpable acts of minors are beyond dispute. Nevertheless, this measure can be executed only in cases where it seems necessary for the prevention of complete moral ruin of minors. The use of the prerogative bestowed by paragraph 135 of the criminal code is most earnestly requested for the general interest of communities. Utter demoralization and a consequent development of crime can often be prevented by prompt interference.

The age limit specified is identical with that defined by the imperial law:

Since the civil code has transferred obligatory education from the narrow confines of general public education to the other field of public guardianship and social-political care of minors, the reconstructed laws of several States (Brunswick and Oldenburg, for instance) have adopted the age limit of minority defined for the application and extension of the civil law; others (Mecklenburg and Wurttemberg, for instance) have fixed the age limit at 16; others, again, have had the eighteenth year as age limit before. All, however, agree upon the extension of obligatory education law till the age of majority (21 years), where such an extension is peremptorily demanded by the interests of society.

The bill in question (which, as has been stated, is now a law) has adopted the age of 18 years for its general application and the age of majority (21 years) as the limit of its extension in urgent cases, for the following reasons: The young are exposed to the danger of depravity not only during their school life but even to a greater degree during the first years after they leave school, when, whether willingly or under necessity, they have left the paternal home discipline and attempt to fashion their own career independently. It is of the greatest importance to extend the period during which interference for the prevention of depravity is allowed just to these years. On the other hand, the limits of interference must be so defined that the period from the beginning of obligatory education till its legal close suffices to insure the success of the measure. If obligatory education is enforced shortly before the end of the eighteenth year of age, three years are left for its execution until the age of majority. This length of time is requisite, and at the same time reasonably adequate to insure some measure of success.

The law only regulates obligatory education at public cost. However, it recognizes other agencies.

Voluntary and religious charity have done much in Prussia to provide for vagrant, neglected, and depraved children. On October 1, 1898, authentic investigations in Prussia showed that 678 educational institutions for orphan, neglected, and depraved children had been established and were supported by voluntary charity. Their wealth in real estate and capital is estimated at nearly 100,000,000 marks (\$33,800,000). Their annual expenses exceed 11,000,000 marks. They could accommodate 40,626 wards, but the actual number of inmates is 30,722. Besides these institutions, many educational societies are in existence that place

vagrant and depraved children in families and contribute nearly all the means for their support. In future orphan courts will give greater consideration to the cooperation of voluntary assistance in the care of neglected minors. This privilege is granted in paragraphs 1666 and 1838 of the civil code and is calculated to lighten and promote the work of voluntary charity. The chief obstacle in the way of beneficial action of such institutions and societies is that the admission and length of stay of the children in institutions and families depend upon the consent of the parents. Foolish or mercenary parents either hesitate to confide their children to these institutions or allow them to be educated free of cost until after they are able to earn money. As soon as there is any prospect of profiting by their children's labor these are removed, even though their education is not completed, and the unfavorable relations in which they are placed destroy the good results of the education which they have enjoyed. Judges of orphan courts have the power to interfere in all cases where the physical and intellectual welfare of children is jeopardized by the way in which parents and guardians exercise their authority.

To interfere with charity by legal measures might disturb its effect and prevent the growth of its work. It is of the highest importance that charity should care for neglected and depraved youth. Civil authority should be exercised only when efforts of charity fail.

According to experience in Baden, Hesse, and Alsace-Lorraine, the number of wards in reformatory institutions will double in Prussia after the law is in force. The number of inmates is now 10,687 to 31,585,123 inhabitants, or 3.4 to every 10,000 inhabitants.

In conclusion, it is interesting to note what position the law holds in the old question of dispute—whether education in families or in institutions is better for neglected children.

At present the dispute may be considered settled, in so far as no decisive distinction can be made between the two methods, nor can any legal decree be defined for the application of either. Each case must be decided on its own merits, according to a ward's individuality, the kind of causes of his depravity, and the possibility of finding a proper family. In point of practice, younger children not much depraved at first receive their education in families. If this measure proves untenable, institutional education replaces that in families. Wards who have left school or wards whose moral depravity is at a lower ebb shall, in the first place, be put into institutions to undergo a physical and moral cleansing process. As soon as this is over they shall be placed in families under the supervision of the head of the institution, those attending school to be cared for, those who have left school to be employed as apprentices and servants. If they conduct themselves badly or if the family proves unsuitable, they shall be taken back into the institution. After a certain time the attempt at education in families shall be renewed. The necessary result is that by far the largest number of wards will be in families, and all, whether apprentices or servants, will be under carefully regulated supervision.

This is the ground covered by the law. As in all matters of education, so in this case Prussia is not the first or pioneer State of Germany; still its action foreshadows that of others, and States which have not yet revised their obligatory education laws will no doubt conform their amendments to the law of Prussia.

VIII. CHILD LABOR IN GERMANY OUTSIDE OF FACTORIES.¹

Results of an official inquiry (1898) by the Imperial Chancellery.²

Topical outline: (1) Purpose and nature of the inquiry. (2) Results: (a) Statistical results; (b) kinds of occupations; (c) age of children; (d) duration of daily work; (e) condition of work-rooms; (f) legal conditions of child labor; (g) wages of laboring children; (h) police regulations of child labor outside of factories; (i) proposals for future regulation of child labor. (3) Supplement I: Conditions of child labor in some other countries. Supplement II: An article from the Rundschau.

¹ Translated from Vierteljahrshefte des Kaiserlichen Statistischen Amts, 1900, Heft III, p. 97.

² Compare article entitled "Children's claim upon childhood," in Annual Report of the Commissioner of Education for 1899-1900, p. 810.

1. PURPOSE AND NATURE OF INQUIRY.

On December 9, 1897, the imperial chancellor addressed the following circular letter to the governments of the twenty-six States of the Empire:

According to the census of June 14, 1895, there were in Germany 45,375 children under 14 years of age who were wage-earning; 38,267 were employed in industries, 5,276 in trade, and 1,812 in occupations of other kinds. Besides these there were found 135,175 who were employed as farm hands and 33,501 as domestics. These figures apply only to the most important occupations of wage-earning children, and, even so, are far from being accurate statements of actual conditions, since it may be taken for granted that not all wage-earning children have been registered or reported by the census takers. To my knowledge, the number of children employed in partly remunerative labor has not yet been calculated, but from all indications far exceeds the figures quoted in the census summaries.

As regards the distribution of wage-earning children among the separate branches of industry, the only authenticated fact is that but a proportionately small number are employed in factories; the reports of factory inspectors for the year 1896 give 5,312. The inference is that child labor in factories, for which an imperial law, usually called "industrial order," contains restrictive regulations, has lost much in significance, and, on the other hand, has largely increased in occupations outside of factories—in trade and home industries,¹ for instance.

To exact a certain amount of work from children is perfectly justifiable, as it accustoms them to physical exercise, arouses a sense of diligence and economy, and prevents idleness and wrongdoing, if parents are not in position to give them the necessary watchful care. Moreover, out of consideration for health, a moderate application to field and garden labor which, when properly regulated, gives children the opportunity for exercise and occupation in the open air, according to their strength, is not only allowable, but useful and commendable. Child labor, where it is intended to help parents in meeting the expenses of a household, is to be countenanced only in exceptional instances, especially as children's pay is very insignificant and disproportionate to the disadvantage of the drain upon their physical powers. In all cases, however, when the kind of occupation is not adapted to children, when working hours are too long, when the work required must be done at unseasonable times and in appropriate places, child labor deserves the most serious reflection. The question concerns not only danger to health and morals, but presents difficulties in enforcing school discipline and under some circumstances makes compulsory education an illusion. Children who are tired out, and whose energies have been taxed in unwholesome rooms till late in the night, have not the strength to give attention to study. I need only mention boys who are employed late in bowling alleys, newsboys who work early in the morning, and the great increase in the number of children engaged in all branches of home industry. Recent investigations in different places show that the interests of children necessitate giving the most earnest attention to their employment as wage-earners; and that without interfering with dependent interests, and especially parental authority, glaring evils should be remedied and further harm prevented. The press, of whatever political persuasion, has lately drawn attention to this matter.

Present legislation allows the following course of action: In the first place, the regulations of the industrial order of 1891, applying to the employment of children in factories, restrict child labor in so far as articles 3 and 4 of section 154 may be respectively extended to workshops in which motors are regularly used, and also to workshops in which none but members of the family of the employer are employed, as well as to buildings. Inquiries into the necessity and manner of execution of section 154, article 3, are almost completed, while, in pursuance of the decree of May 31, 1897, concerning the execution of sections 135 to 139 and 139b of the industrial order toward workshops of clothing and laundry establishments, investigations have begun. Furthermore, the provisions of section 120c of the industrial order grants a certain degree of redress by compelling employers who engage hands under 18 years of age to take the necessary precautions toward health and morality in the arrangement of their shops, as well as in the regulation of work, which the age of their employees demands. In pursuance of this regulation, the police have in several places interfered, with some success, to prevent the abuse of child labor. The enactment of general regulations through the instrumentality of the federal council (Bundesrath or Senate) is suggested in connection herewith.

Meanwhile it seems as though not all evil conditions can be improved by the

¹ This term is applied to trades in which the employees do their work at home, having tools, such as looms, of their own.

application of the regulations mentioned. Thus section 154, articles 3 and 4, can only reach children employed in workshops, and so can only be applied to their occupation within the said confines. Besides, the extension of protective regulations to workshops in which motors are not used regularly is allowable only if the employer engages at least one person who is not a member of his own family. Consequently the regulation of child labor is not even possible in all workshops. On the other hand, independent of the fact that its applicability to the conditions in question is disputed by many, section 120c becomes ineffective where children are not bound by contract, but help their relations with the work done.

A right judgment on all pertinent questions is possible only when evidence is perfectly clear as to the existence of evil conditions of child labor in certain branches of industry, and likewise as to the nature of the evil. The information so far obtained is very deficient. For complete knowledge, it seems, therefore, necessary to institute inquiries as to the age of wage-earning children; the kind of occupation; the length and distribution of working hours; the arrangement of workrooms, as well as the legitimate nature of labor conditions; the increase of wages resultant from limitation of child labor and industrial child labor outside of factories, and to the exclusion of agricultural occupations and domestic service. Then the question whether, and how far, investigations based on the execution of section 154, article 3, can be deferred may be considered later on.

In the prospective inquiries I intend to cooperate with the commission on labor statistics. This commission shall be informed, above all things else, of the number of wage-earning children in general and the number of those employed in separate branches of industry, as well as of their distribution throughout the different sections of the Empire. Furthermore, it is desired that the said commission be acquainted with what information has already been gained on the subject, and that it receive a statement of what measures have been taken by the different States to suppress unwarrantable industrial labor.

I therefore beg leave to request of ——— to oblige me with all pertinent information obtained, and at the same time to give me the necessary data for respective districts under the following heads:

(1) How many children under 14 years of age are employed outside of factories? These shall include all who are engaged in any industry exclusive of agriculture, gardening, fruit and vine culture, or in menial service, even though they receive no wages and are not bound by contract, but only assist other members of their families.

(2) In what branches of industry and for what occupation in these branches are children employed? The important fact here to be kept in view is the service for which children are preferably made use of to create the product.

(3) How great, approximately, is the number of (a) children employed in the separate branches of industry; (b) of those employed within these branches in work specified under the second heading?

As regards the execution of the requisite preparatory inquiries, the cooperation of teachers has much in its favor, since their control of children during school hours gives them the opportunity of learning whether these are employed when away from school, and consequently whether their strength is overtaxed. In this case it must be borne in mind that many parents, from fear of having their children's assistance limited in consequence of the inquiries, will influence them to make false report, so that conditions may present favorable appearance. I therefore urge that the measure of cooperation of teachers be carried out as secretly as possible, so that any unwarrantable influence on the part of parents be prevented.

I request that all communications be delivered by April 1 of next year.

Thereupon the different State governments conducted investigations from January until April, 1898. These extended to nearly all parts of the Empire. Württemberg reported for 24 of its 64 governmental districts (the municipal district of Stuttgart and 23 more important districts, including the Schwarzwald industries); and Saxe-Coburg-Gotha confined investigations to 63 centers of industry, while its communities number 306. In Bavaria and Bremen the police acted as agents; everywhere else, teachers of elementary schools.

The limits of the inquiry are partly narrower and partly more extensive than as defined in the circular. Whereas child labor was to be considered as it occurs in industry, though outside of factories, Saxe-Coburg-Gotha limited its report to children employed in home industries. Lübeck and Alsace-Lorraine included children employed as farm hands and waiters; Saxony, Württemberg, Baden, Mecklenburg-Strelitz, and Saxe-Altenburg included those in menial service. The

pertinent calculations have, therefore, not been considered in the Imperial statistical report. In some cases, as with Prussia and Saxony, whose inquiry blanks specified all occupations in industry, trade, and commerce, children employed in factories have been included. Prussia, Wurttemberg, Brunswick, Lübeck, and Alsace-Lorraine sent in separate reports for the sexes; others followed the same plan in part, and others, again, omitted making any such distinction.

Some States considered the remark made in the circular that figures relating to distribution of child labor have value for legislation only when they are accompanied by references to age, length of working time, night and day work, the arrangement of workrooms, and wages, and acted accordingly by giving detailed information.

A few States examined the further points, whether certain occupations are appropriate or inappropriate, age and strength of children of school age (6-14) considered, and what influence they exert on body, mind, and soul. Apposite statements of police regulations concerning the restriction or prohibition of different occupations, and further measures to be adopted, were handed in in connection with the statistics. The subsequent statement of results will mention which States treated these questions and in what manner.

If, as regards the points of view considered in the inquiry, the material at hand is varied, not being uniform even for the same State, it is much more varied as regards its arrangement and revision on the part of the separate States. As the circular made no reference to the grouping of the occupations, etc., the separate States did not follow the same plan of classification. Prussia, Bavaria, Baden, Hesse, Mecklenburg-Schwerin, and Alsace-Lorraine adopted the arrangement of census statistics for industry. Saxony, Saxe Weimar, Reuss, and Bremen arranged the industries in alphabetical order, and Reuss gave the occupations within the limits of each industry, likewise in alphabetical order. Brunswick, Anhalt, and Hamburg worked on individual lines with specially prepared blanks. Other States made no attempt at a general review. To systematize an Imperial or federal report from the statements thus offered was very difficult and took a great deal of time; a certain degree of uniformity was obtained only by a positive classification of the separate reports into an Imperial scheme.

That of Prussia, in essential features, was adopted as a model. According to this scheme, two tables have been prepared which give the important data on the kind and distribution of child labor. These are headed:

(1) Children throughout the Empire under 14 years of age employed outside of factories, with full data relating to the kind of occupation.

(2) Children in the different States employed outside of factories, without specifications as to kinds of occupation.

In the following article the chief results of this tabulated report are briefly discussed, and in connection with this are given expressions of the different States on questions regarding the distribution of child labor. The supplement is a brief sketch of legislative measures adopted in foreign countries.

2. RESULTS OF THE INQUIRY.

I. NUMBER OF CHILDREN EMPLOYED OUTSIDE OF FACTORIES.

For the year 1898 there are reported to have been employed outside of factories¹ 532,283 children of school age (6-14).

This number, a round half million, expresses the approximate extent of industrial wage-earning child labor, or about 1 per cent of the population of the Empire. As has been stated before, not all districts came under examination, and not all examiners understood the term "industrial labor" alike. Moreover, it must be

¹ This term is understood to include all those manufacturing plants which are classed as "Fabriken" in the census schedule.

remembered that investigations were conducted during the winter months of January and February and partly during the spring of 1893, consequently during a period when the services of children, at other times employed in industries, were made use of for agricultural labor. At all events, the figures are far from giving actual conditions.

The great contrast between the figures of the inquiry of 1898 and those of the special census report of 1895 need create no surprise. In 1895 only 45,375 children were reported to have been employed in industry, trade, commerce, and other wage labor. The enumerators of that year were instructed to report persons without duplication; hence children attending school were specified in the "household lists" as having no other occupation. The 45,375 mentioned as wage earners were, in point of fact, numbered as being persons wholly occupied with industrial labor (Hauptberuf). Such sole employment is a rare occurrence among children, as those under 14 years of age must attend school, and, as a rule, parents in filling out the blanks laid greater stress upon school attendance than upon wage labor, and, accordingly, considered any industrial occupation as a secondary employment (Nebenberuf).¹ What is most astonishing is that as many as 45,375 children should have been found to be exclusively occupied with wage earning. This may be partially explained by the fact that investigations were made in the summer of 1895, and that in many districts so-called summer schools exist which are attended only two to three hours a day. Under certain conditions dispensations from school attendance are granted, and in these cases the remunerative labor of children ceases to be a secondary occupation. The cases in which children dispensed from school attendance in order to receive private instruction are, of course, exceptions. On the other hand, the much higher figures of the inquiry of 1898 are due to the fact that investigations were limited to industrial occupation; consequently children otherwise employed, for instance, as farm hands, domestics, or helpers in industrial work at home, are considered in the inquiry of 1898 as having a single occupation, and are all included in the number of industrial wage-earning laborers, even though this kind of employment plays a more subordinate part than the other kinds. No such course of action was followed in the special census report of 1895.

The value of the present inquiry lies less in the resultant statistics than in the different questions which it has provoked concerning child labor. The following numbers are reported for the different States and provinces:

TABLE I.—*Children under 14 years employed outside of factories in the various States and provinces of Germany.*

States and provinces.	Number of children employed in industry.	Total number of school age, 6-14 years. ^a	Percentage of those employed.
Prussia.....	260,598	5,209,518	5.18
East Prussia.....	5,781	323,860	1.79
West Prussia.....	5,515	257,029	2.15
City of Berlin.....	25,146	196,050	12.83
Brandenburg.....	23,165	425,976	5.44
Pomerania.....	7,008	252,966	2.77
Posen.....	5,771	320,550	1.80
Silesia.....	48,456	741,352	6.54

^a In Prussia and Brunswick the number of children of school age refers to the beginning of the year 1898 (the date of the inquiry); in Bavaria, to the school year of 1895-96; in Saxony, to 1893; in Wurttemberg, to 1896-97; in Hessa, Mecklenburg-Schwerin, and Bremen, to 1897. The numbers of the other States are taken from the school census of 1890.

¹ The Germans are very particular in specifying a man's "Hauptberuf" and "Nebenberuf," i. e., principal and subordinate calling or occupation. A physician acting as health officer would naturally be enumerated as a physician "im Hauptberuf" and as a health officer "im Nebenberuf."

TABLE I.—*Children under 14 years employed outside of factories in the various States and provinces of Germany—Continued.*

States and provinces.	Number of children employed in industry.	Total number of school age, 6-14 years.	Percentage of those employed.
Prussia—Continued.			
Saxony.....	26,092	452,398	5.77
Sleswick-Holstein.....	12,643	211,825	5.97
Hanover.....	17,518	392,551	4.46
Westphalia.....	26,286	492,875	5.33
Hesse-Nassau.....	15,191	268,102	5.66
Rhineland.....	50,188	863,977	5.81
Hohenzollern.....	843	10,607	7.95
Bavaria.....	12,997	522,165	1.58
Saxony.....	137,831	604,600	22.80
Wurtemberg.....	α 19,546	299,632	6.52
Baden.....	28,788	295,624	9.74
Hessia.....	8,868	156,391	5.67
Mecklenburg-Schwerin.....	2,295	96,918	2.31
Saxe-Weimar.....	5,660	55,943	10.12
Mecklenburg-Strelitz.....	213	16,684	1.28
Oldenburg.....	1,927	65,035	2.96
Brunswick.....	2,932	74,104	3.96
Saxe-Meiningen.....	6,684	40,754	16.40
Saxe-Altenburg.....	5,686	29,548	19.24
Saxe-Coburg-Gotha.....	5,455	35,974	15.16
Anhalt.....	1,382	48,236	2.87
Schwarzburg-Sondershausen.....	1,456	13,676	10.65
Schwarzburg-Rudolstadt.....	2,487	15,148	16.42
Waldeck.....	62	10,777	.58
Reuss, senior line.....	1,488	10,988	13.54
Reuss, junior line.....	1,502	21,232	7.07
Schaumburg-Lippe.....	447	6,867	6.07
Lippe.....	1,687	25,222	6.66
Lübeck.....	1,218	12,706	9.59
Bremen.....	867	25,627	3.38
Hamburg.....	5,419	95,574	5.67
Alsace-Lorraine.....	17,878	245,876	7.27
The Empire.....	α 514,283	8,334,919	6.53

α Inclusive of 40 municipal districts of Wurtemberg estimated to have 12,000 wage-earning children, no special effort having been made in investigating the conditions; but the estimate is a fair one.

The great variations in the figures of the foregoing table showing the extent of child labor are particularly noticeable in the third column, which exhibits the percentage of children of school age, and are altogether of a formal nature, based upon the already mentioned differences in the methods of enumeration and the different interpretations of the terms used in the circular letter. Nevertheless they undoubtedly correspond to actual conditions. For instance, if when compared with the percentage found for the whole Empire (6.53 per cent) of wage-earning children of school age the city of Berlin, the Thuringian States, and especially the Kingdom of Saxony, with as high as 23.8 per cent, show a large percentage, the inquiry confirms the fact already known that industrial child labor is made use of to an alarmingly great extent in large cities and in the home industries of Thuringia and Saxony.¹ The relatively low figures of East and West Prussia (the two provinces farthest east on the Baltic), Pomerania, Posen, and Mecklenburg are explained by the fact that children are employed for agricultural labor.

KINDS OF OCCUPATION OF CHILDREN.

Children are employed in many kinds of industrial occupations. To give a brief review of these they have been divided into seven groups.

¹ For instance, in some parts of Saxe-Coburg-Gotha 86 per cent of school children under 14 years of age are employed in home industries (see foot note on page 55), and 57 per cent in the district of Sonneberg, in Saxe-Meiningen, the center of the toy manufacturing of Germany.

The first group includes all assistants in industry proper, subdivided according to the census list of industrial statistics into subgroups, classes, and kinds. (A separate statement of the number of children employed in these subdivisions is contained in the report, but is here omitted. The exhibit covers a number of pages of close print, which would be of interest only to specialists. Instead of it a summary is offered in Table III.)

The second group comprises assistants in trading, such as selling of merchandise, peddling, etc.

The third group, the smallest of the seven, includes all assistants in the business of transport on land and water. The full tables go into particulars only for a few States, since other States gave only summary reports on these employments.

The fourth group treats of occupations in connection with taverns and hotels, such as setting up pins in bowling alleys, serving beer, waiting upon guests, and cleaning rooms or utensils.

The fifth group refers to different services as carriers and deliverers (the delivery of bread, cake, etc., milk, newspapers, books, coal, and laundry).

The sixth group includes all messengers and errand boys and girls.

The seventh group comprises all other assistants in wage-earning labor (clerks, copyists, helpers in public shows, collectors of manure, bones, and rags, etc.).

A brief summary will be found in Tables II and III, the latter giving the subdivisions of Group 1 for industry proper.

TABLE II.—*Kinds of occupation.*

Groups of occupation.	Absolute numbers.				Relative numbers.			
	Boys.	Girls.	Sex not stated.	Total.	Boys.	Girls.	Sex not stated.	Total.
A. Industry proper.....	72,428	59,318	175,077	306,823	<i>Pr. ct.</i> 57.82	<i>Pr. ct.</i> 55.09	<i>Pr. ct.</i> 75.11	<i>Pr. ct.</i> 57.64
B. Trading.....	7,507	4,540	5,576	17,623	5.92	4.22	2.39	3.31
C. Transport business.....	2,014	163	514	2,691	1.05	.15	.22	1.51
D. Taverns and hotels.....	12,757	2,168	6,695	21,630	6.66	2.01	2.87	4.06
E. Carriers and deliverers.....	67,188	36,966	31,676	135,830	35.09	34.33	19.59	29.52
F. Messenger service.....	23,321	2,134	10,454	35,909	12.18	1.88	4.48	6.75
G. Other service.....	6,281	2,387	3,119	11,787	3.28	2.22	1.34	2.21
Total.....	191,496	107,676	233,111	532,283	100	100	100	100

¹ See footnote to Table I, which explains the apparent discrepancy.

More than one-half of the half a million children employed are engaged in labor of a purely industrial character. A fourth are employed for errands and in delivery service. As regards children employed in industry proper the most, 143,710, or 46.84 per cent, are engaged in textile industries. Cabinet work and carving, manufacture of clothing and scouring come next in order, with 40,997 children, or 13.62 per cent. Home industry has a special significance in these groups. On the other hand, few children are employed in those industries necessitating factory labor exclusively, as the manufacture of chemicals or of illuminating materials, fats, oils, etc., or in those whose character presupposes certain qualifications of the labor personnel, as mining and the arts. If children are employed at all they are only minor assistants. The cases in which they are direct labor factors form exceptions. The extremely low figures in this connection, sometimes only one child listed for the whole State, are due either to a vague view of the employment in question or to the fact that the occupation was pursued accidentally but once. Any regular or extensive employment in such occupations is forbidden by imperial law.

TABLE III a.—*Kinds of occupation in industry proper.*

Kinds of occupation.	Number of children employed.			
	Boys.	Girls.	Sex not stated.	Total.
I. Horticulture and truck gardening	160	98	50	308
II. Stock raising and fishing	274	138	99	511
III. Mining and smelting	354	97	17	468
IV. Stone and clay industry	2,577	1,044	9,269	12,890
V. Metal working	7,042	2,883	4,433	14,358
VI. Machine and instrument making	843	200	3,871	4,914
VII. Chemical industry	200	64	245	509
VIII. Secondary products of forests	143	41	145	329
IX. Textile industry	25,955	23,725	83,020	143,710
X. Paper industry	2,804	2,019	4,147	8,970
XI. Leather industry	915	300	1,729	2,944
XII. Wood and carving industry	12,186	6,715	22,900	41,801
XIII. Food and delicacies	9,719	5,810	12,116	27,645
XIV. Clothing and scouring	7,916	10,009	23,372	40,997
XV. Building trades	1,064	67	3,094	4,225
XVI. Polygraphic industries	241	55	422	718
XVII. Industrial arts	45	7	49	101
XVIII. Industries not specified	290	46	1,089	1,425
Total	72,428	59,318	175,077	306,823

TABLE III b.—*Kinds of occupation in industry proper.*

Kinds of occupation.	Relative numbers of children employed.			
	Boys.	Girls.	Sex not stated.	Total.
I. Horticulture and truck gardening	<i>Per cent.</i> 0.22	<i>Per cent.</i> 0.17	<i>Per cent.</i> 0.03	<i>Per cent.</i> 0.10
II. Stock raising and fishing .....	.38	.23	.06	.17
III. Mining and smelting .....	.49	.16	.01	.15
IV. Stone and clay industry	3.56	1.76	5.29	4.20
V. Metal working	9.72	4.86	2.55	4.68
VI. Machine and instrument working	1.16	.34	2.21	1.60
VII. Chemical industry .....	.28	.11	.14	.17
VIII. Secondary products of forests .....	.20	.07	.08	.11
IX. Textile industry	35.84	50.11	50.28	46.84
X. Paper industry	3.87	3.40	2.37	2.92
XI. Leather industry	1.26	.51	.99	.96
XII. Wood and carving industry	16.82	11.22	13.08	13.62
XIII. Food and delicacies	13.42	9.80	6.92	9.01
XIV. Clothing and scouring	10.62	16.87	13.35	13.56
XV. Building trades	1.47	.11	1.77	1.28
XVI. Polygraphic industries .....	.33	.09	.24	.23
XVII. Industrial arts .....	.06	.01	.03	.03
XVIII. Industries not specified .....	.40	.08	.62	.47
Total	100	100	100	100

In various reports the following occupations are mentioned as inappropriate for children: The breaking of stones, working in marble quarries or stone pits, stone cutting and polishing, brick burning, masonry, forging, locksmith work, and the sawing, carrying, and piling of lumber. Objection is made to these occupations on account of the so-often attendant physical exertion. (Reports from Hesse and Anhalt.)

Other kinds of work are characterized as peculiarly prejudicial to health, as glazing and the crushing of dyes and clay in potteries; cleaning of rabbit pelts, because of the offensive effluvia which give the children pale complexions and are spread in schools through clothing; the manufacture of buttons, tobacco, cigars, and slate pencils, because of the dust developed; the making of explosives by means of fulminating silver, which occupation was forbidden in Saxe-Altenburg in paragraph 120 d of the industrial law of that State. Bead work, the shredding of saffron, and the sorting of the different parts of saffron mills, and

other work by which dense dust is developed, as well as the occupations mentioned before, as the stripping of tobacco leaves in cigar factories; the making of buttons and slate pencils is particularly ruinous to the eyes, bringing about inflammation and near-sightedness. All such work as painting on porcelain ware, frequently done at night by lamplight (report of Schwarzburg-Rudolstadt), is likewise injurious to the eyes.

Numerous occupations engaged in at home are given as very injurious to health, such as textile work, basket braiding, chair caning and reed work, the manufacture of toys, buttons, porcelain, and glassware. Work of this kind is often done in musty rooms that serve as sleeping apartments as well as work and living rooms, and are seldom thoroughly aired, particularly during the winter months. Independent of this fact, complaints are made that children employed at home are obliged to tax their strength to a great extent, working mostly, as Anhalt reports, till 9 and 10 o'clock at night; young children, whose school hours begin later than those of the older ones, work one or two hours before school. During the term of urgent work in home industry the occupation of children is particularly taxing and uninterrupted.

The consequence of excessive employment of children is arrested physical and mental development. According to the reports of the teachers of the city of Greiz (Reuss, senior line), detrimental effects were noticeable in 56, or 11.5 per cent of all wage-earning children, and especially in those employed in weaving. The children look pale and sickly; are narrow-chested; have curved spines; suffer from eye troubles; forfeit mental vigor, and become dull and uninterested. Overexertion and inadequate food often produce nervousness and weakness among children. Education suffers under these conditions. Besides, work that occupies children until late at night and keeps them away from home and among adults exercises a bad influence on morals and manners; unbecoming conversation is often held between half-grown boys and girls. In many cases the immoderate taxation of strength during youth is followed by premature physical debility and incompetency for work in school. (Reports from Bavaria, Wurttemberg, Hessia, Saxe-Altenburg, Saxe-Coburg-Gotha, Anhalt, Reuss senior line, and Schwarzburg-Rudolstadt.)

Other more favorable judgments of child labor, however, are not lacking. Reports were sent in by some districts in which no detrimental influences have been noticed. When child labor is not carried to excess, and is counterbalanced by activity in the open air, that is by farm or garden work, or gathering berries, wood, and leaves, it is not to be condemned without further cause. (Reports from Wurttemberg, Gotha, Schwarzburg-Rudolstadt.) Thus, in 33 of the 63 localities of Saxe-Coburg-Gotha in which children are employed at home, no disadvantages were noticed. Among the remaining 30 with evil effects, 4 reported disadvantages to the physical, 11 the same to the mental, and 15 the same to the mental and physical development. The percentage of children employed in wage-earning was particularly high in these places. While in the 33 school districts without detrimental results of child labor only 23.6 per cent of the children were employed, the percentage in the remaining 30 school districts was as high as 37.8 per cent, in the 15 school districts, with equal disadvantages to body and mind, the percentage rose to 46.5 per cent.

The opinion of the factory inspector of the Duchy of Saxe-Coburg-Gotha on child labor, based on personal observations, is worthy of consideration. He considers it proper when (a) children are thus accustomed early to regular occupation (cultivation of diligence, prevention of the incipient dangers of idleness); (b) the wages of parents are thereby considerably increased; (c) the cares of households are thereby lightened. On the other hand, he considers it a curse when (a) children are employed at too early an age; (b) children are employed for too long

a time on one day; (c) early in the morning, before school; (d) till late at night; (e) the workrooms are arranged without regard to hygiene; (f) workrooms serve as sleeping apartments; (g) a large number of children congregate in strange houses for work.

Among the occupations entered in the other groups (see Table II, B to G) the following are mentioned as deserving of some reflection: The delivery and selling of bread and cakes and fish, milk, newspapers, etc., the setting up of pins in bowling alleys, and tracking game. The delivery of bread and cakes not only occupies children at too early an hour, so that they get to school too late, and are sleepy, apathetic, and exhausted, but it also keeps them working until late in the night. In delivering goods and selling flowers and small articles of use, children go from one tavern to another, hear improper language, sacrifice the love of truth by trying to get rid of their wares through all possible kinds of representation, form the habit of taking things to eat by stealth and indulging in smoking at too early an age, and accustoming themselves to the drinking of spirituous liquors, for which they spend the money they have received. The same evil consequences attend employment in bowling alleys and playing dance music, which occupations continue till late in the night. The delivery of newspapers that occupies children before and after school hours overtakes physical strength, and the result is that children get to school tired out. (Reports from Bavaria, Hessa, Anhalt, Schwarzburg-Rudolstadt.)

The foregoing summary (see Tables III a and III b) gives an approximate idea of the number of children employed as above mentioned. The specification as to States and districts in which the evils occur is omitted here.

III. AGE OF WAGE-EARNING CHILDREN.

Prussia, Hessa, and Reuss, senior line, give detailed information concerning the ages of wage-earning children. The Prussian reports refer to 11,891 children, or 4.04 per cent; most of the fourteen provinces of the Kingdom are included. These 11,891 children are specified as follows:

Ages (years).	Number of children.	Percent-age.
6 to 7.....	175	1.5
7 to 8.....	491	4.1
8 to 9.....	843	7.1
9 to 10.....	1,378	11.6
10 to 12.....	3,511	29.5
12 to 14.....	5,493	46.2

Hessa classes the children in two groups—in those 6 to 10 years old and those 10 to 14 years old—and distinguishes the different occupations. The following summary is worthy of attention:

Occupations.	Children.	
	6 to 10 years.	10 to 14 years.
Setting up pins.....	395	1,013
Delivery of bread and cakes.....	a 196	850
Delivery of newspapers.....	a 275	653
Stringing and sewing on beads.....	242	252
Spooling.....	161	288
Stripping tobacco leaves.....	106	94
Cleansing of pelts.....	95	62
Peddling.....	147	76

a Among them one child less than 6 years old.

In the city of Greiz (Reuss, sen. line) wage-earning children were found of the following ages:

Age (years).	Boys.	Girls.	Total.	Intextile industry alone.
6	4	1	5	4
7	13	12	25	20
8	16	24	40	29
9	23	17	40	26
10	37	27	64	31
11	70	28	98	34
12	54	36	90	40
13	59	20	79	16
14	39	6	45	11
Total	315	171	486	210

Very young children are employed particularly in the weaving industry.

Saxony mentions that in many branches of industry—as lace making, straw and reed braiding, the manufacture of stockings and gloves—children are employed before they are required to go to school. No accurate figures concerning this point could be obtained. The Duchy of Saxe-Meiningen reports that, as a rule, children are required to work as soon as they are old enough to go to school, and that in some cases children of 4 years are put to work, because the critical position and paltry wages of many branches of home industry necessitate the utilization of any available labor factor.

IV. DAILY WORKING HOURS.

Prussia, Wurttemberg, Mecklenburg-Strelitz, Saxe-Meiningen, Saxe-Coburg-Gotha, Anhalt, and Reuss, sen. line, reported on the length of time in proportionate numbers; also to a limited extent Bavaria, Schwarzburg-Rudolstadt, Hessa, and Saxe-Altenburg.

The Prussian reports have been based upon the question proposed by the circular letter of inquiry as to how many wage-earning children work more than three hours a day and on how many days in the week they are required to work longer than three hours. The results of investigation are:

Child labor in—	More than 3 hours a day.			Percent- age of working children.
	Boys.	Girls.	Total.	
A. Industry proper.....	36,430	26,927	63,357	<i>Per cent.</i> 56.06
B. Trading	3,556	1,810	5,366	48.11
C. Transport business.....	974	44	1,018	49.63
D. Taverns and hotels.....	6,066	494	6,560	47.47
E. Carriers and deliverers.....	14,677	4,771	19,448	19.95
F. Messenger service.....	12,932	538	13,470	54.74
G. Other service.....	1,207	256	1,463	19.63
Total	75,842	24,840	110,682	41.05

The number of those who work more than three hours a day is, accordingly, large in proportion. To form a correct conclusion, however, we must consider whether those working hours are uninterrupted, whether they are arranged before or after school hours, etc.

Among the 110,682 children the following numbers were occupied more than three hours a day during the week:

Branches of work. <i>a</i>	Once a week.	Twice a week.	Three times a week.	Four times a week.	Five times a week.	Six times a week.	Seven times a week.
A.....	1,933	7,956	3,711	4,584	4,324	39,378	1,471
B.....	639	1,122	461	354	184	2,089	517
C.....	94	167	60	79	15	492	111
D.....	2,324	1,361	743	425	191	841	675
E.....	4,771	3,586	1,446	728	579	5,358	2,980
F.....	896	2,133	631	498	251	7,381	1,710
G.....	181	431	135	120	45	394	157
Total.....	10,808	16,756	7,187	6,788	5,589	55,933	7,621
Per cent.....	9.76	15.14	6.49	6.13	5.05	50.54	6.89
Of these were girls.....	2,597	3,967	1,951	2,175	2,447	20,024	1,649
Per cent.....	7.45	11.47	5.60	6.25	7.02	37.48	4.73

a See foregoing table for classification.

More than half of all the children employed for over three hours a day worked thus intensively on six days in the week. If we add to these the children who work still harder, namely, more than three hours every day, Sundays included, Prussia has not fewer than 63,554 school children (41,881 boys and 21,673 girls) who perform industrial labor beyond reasonable limits.

The reports from Wurttemberg lead us to infer that working hours, in by far the greatest number of instances, never exceed 3 hours a day, especially in summer and during harvest times, when there is greater need of agricultural hands. Nevertheless, the district of Neuenburg reports that children are occupied from 3 o'clock in the afternoon till far in the night in making chains of silver and rolled-gold wire; the same can be said of lace and crochet work and spooling in the district of Nürtingen, where evening work sometimes lasts until 11 o'clock. In Spaichingen children are employed in pulling feathers, by which much dust is developed, until 10 o'clock at night, and in manufacturing parts of shoes, from half-past 5 until 9, and sometimes until 11 or 12 o'clock. In Geislingen from 1 hour to 6 hours are demanded for the manufacture of corsets and tights, and for filing and polishing metals. The working hours are the same for Gmünd in reference to goldsmiths' wares. Balingen, another school district in Wurttemberg, reports that children are employed in making tights, not only after school till late at night, but during the midday recess.

In Mecklenburg-Strelitz 62 of 213 children work longer than 3 hours a day, as follows: Thirty-five work 4 hours; 16 work 5 hours; 9 work 6 hours; 2 work 7 hours a day. Of these 213 children 108 are employed on all 7 days, 43 on 6, and 20 on 3 days during the week; 72 work at night, 42 in the morning, 16 at noon, 18 in the morning and at night, 2 in the morning and at noon, 30 in the morning, at noon, and at night, and 19 indefinitely.

Saxe-Meiningen reports that children as a rule work only after school, from 3 o'clock in the afternoon until about 9 o'clock at night. More detailed information on the length of time of child labor was given by the industrial district of Sonneberg. Working hours (almost exclusively in home industry) in Sonneberg are specified as follows:

In 4 school districts till 9 p. m.; in 8 school districts till 10 p. m.; in 13 school districts till 11 p. m.; in 8 school districts till 12 p. m.; in 3 school districts till 2 a. m.; in 2 school districts till 3 a. m.; in 1 school district till 4 a. m.; in 3 school districts all night, i. e., toward Christmas.

In 62 localities of Saxe-Coburg-Gotha working hours are reported to be as follows:

Number of localities.	Number of hours per day.	In these localities the work caused—	
		No harm.	Harm.
13	3	11	2
23	5	12	11
9	6	6	3
2	7	-----	2
10	8	2	8
1	9	-----	1
4	10	-----	4

Labor in these instances means turning in wood, wood carving, making buttons, weaving baskets, webbing (gurtweben), spooling, and making toys. With the exception of 2 in all the above-mentioned localities, with more than 6 working hours, evil effects were noticeable in the children; whereas in the 45 localities, with from 1 to 6 hours, only 16 cases of harmful influence are recorded. According to the experience of the factory inspector, 4½ hours are the maximum time during which children can be employed without detriment to their health and school duties. Even then it is presupposed that they are not occupied every day in the year.

The reports from Anhalt state that children work under great strain until 10 o'clock at night, making rush mats and reedwork; children carry bricks from 1 till 6 o'clock in the afternoon, and become very exhausted. In the cigar and tobacco factories of Anhalt children work from 1 hour to 6 hours a day (from 3 or 4 till 6 or 8 p. m.), in close rooms, the air of which is filled with tobacco dust, stripping and smoothing tobacco leaves, wrapping, and pasting labels and paper boxes.

In the city of Greiz (Reuss senior line) hours vary between 3 and 50 a week. In most instances children work from 3 to 4 hours a day. The highest number of working hours a week is reached in cigar factories, in the book trade, and in taverns. In the first mentioned children are occupied from 29 to 38 hours and during vacation 60 hours a week. These figures prove that children are made use of to a most pitiable extent, especially when we consider that just in this line of occupation they work together in large numbers and in poorly ventilated rooms, and receive only from 1.20 marks (20 cents) to 1.50 marks (38 cents) a week as wages. (Greiz has introduced measures to remedy these evils.) The children employed for setting up pins in bowling alleys work from 30 to 49 hours a week, often till 2 and even till 3 o'clock a. m.

Schwarzburg-Rudolstadt reported that children work at rope making in Frankenhausen, as a usual thing, from 3 till 7 and 8 o'clock p. m. In Leibis (district of Königsee) children help their fathers in sawmills till 11 o'clock at night. In several localities children work a few hours before school in the morning and are, besides, employed in the afternoon till late at night.

Bavaria mentions the fact as an existing evil that children are employed till late at night in setting up pins in bowling alleys and serving beer and liquor in taverns and country inns. Like reports were sent in from Hessa which particularly condemn the fact that children are employed in playing dance music till morning. Similar reports come from Schwarzburg-Rudolstadt and Saxe-Altenburg.

V. ARRANGEMENT OF WORKROOMS.

In regard to the condition of the workrooms, Hessa reports that the cleaning of pelts and hair clipping deserve special consideration when it is done in close quarters. Nevertheless 114 children under 10 and 97 between 10 and 14 years of age were thus employed.

Saxe-Meiningen stated as a well-known fact that small workrooms in which meals are prepared and varnish or lime kept hot during work hours are most prejudicial to the health of adults and children. This is especially true of rooms in which wooden toys are made, as they are heated, even in summer, so that the goods may be dried before being delivered.

Anhalt stated that the 145 children employed in the manufacture of tobacco work mostly in rooms that are likewise used for living rooms and sleeping apartments and are poorly aired, particularly in winter.

VI. LEGAL CONDITIONS OF CHILD LABOR.

Only Mecklenburg-Strelitz, Saxe-Meiningen, Anhalt, and Lübeck reported with reference to the legal status of child labor. In Mecklenburg-Strelitz only 26 of the 213 children employed in wage earning possessed a contract which provided for a period of giving notice to quit; 4 had a week's notice, 6 a 2 weeks', and 16 a month's notice. The other children were, in part, under contract without any notice of leave, and in part worked in the homes of relatives.

Saxe-Meiningen reported that, as a rule, children worked in the families of their nearest relatives. The same can be said of a large number of children in Anhalt, who are employed in most cases without pay and leave by relatives in their fathers' trade and under the supervision of parents. Even when they work away from their own home no contract in the legal sense of the term exists. Still cases are cited where children are engaged subject to a month's notice to deliver bread, etc., and for work in breweries (washing bottles and pumping water) subject to a week's notice.

In Lübeck 649 of the total number of children under 14 years of age (1,308) employed outside of factories assist their relatives; 659, or 50.4 per cent, stand in some relation by contract to an employer.

VII. WAGES OF CHILDREN.

As the majority of children work for relatives, chiefly parents, they in most cases receive no especial monetary compensation. Even when they work for strangers they are paid by board and lodging. Mecklenburg-Strelitz, Saxe-Meiningen, Saxe-Coburg-Gotha, Anhalt, Schwarzburg-Rudolstadt, and Reuss senior line reported the amount of wages received by children.

The oft-mentioned 213 children in Mecklenburg-Strelitz receive monthly wages, as follows:

	Marks.
2 children.....	0.50=50.12½
13 children.....	1.00= .25
29 children.....	2.00= .50
47 children.....	3.00= .75
25 children.....	4.00= 1.00
6 children.....	5.00= 1.25
4 children.....	6.00= 1.50
2 children.....	7.00= 1.75
1 child.....	8.00= 2.00
84 children, partial or full board and occasional tips.	

Saxe-Meiningen reported from five localities in the district of Saalfeld that the weekly wages of children vary between 2.40 marks and 4 marks. In some instances 5 pfennigs (=1½ cents) per hour are paid. School children who serve as waiters receive for a day's work up to 6 hours 1 mark (25 cents) to 4.50 marks (\$1.12½) per month. Their pay is often turned into the school savings bank.

The following amounts are reported from Saxe-Coburg-Gotha as daily wages. The least money is earned in the manufacture of buttons. Excepting two localities, which pay from 25 to 30 pfennigs (5 to 6 cents) a day, three pay 4 and 5, and others

10, 12, and 15 pfennigs (1 cent, $1\frac{1}{4}$ cents, $2\frac{1}{2}$ cents, 3 cents, $3\frac{1}{2}$ cents). In some places child labor in the manufacture of dolls is paid 10 to 12 pfennigs, in most 18, 24, and 30 pfennigs, and in four 50 to 80 pfennigs (4 German pfennigs equal 1 cent). In Gotha the manufacture of toys pays 8 to 30 pfennigs, in Coburg 20 to 60 pfennigs. For paper articles (masks, pasteboard goods, and Chinese lanterns) children receive 20 to 50 pfennigs; in only one locality 4 pfennigs (1 cent) are paid a day. For basket weaving and metal work 15 to 30 pfennigs, as a rule, are received. Wood carving pays 20 to 60 pfennigs a day. The factory inspector remarks that in estimating the daily earnings of the 5,455 children in Gotha it must not be forgotten that the total receipts from child labor are considerable and contribute greatly to lessen the burden of household expenses; but whether the material gain counterbalances the evil and harm of extensive home industry, conditions in Saxe-Coburg-Gotha lead one to doubt.

The report of Anhalt states that when not employed at home children receive from 2 to 12 marks (50 cents to \$3) a month in baker's and butcher's shops; from 2 to 5 marks (50 cents to \$1.25) in tailoring, shoemaking, basket weaving, turning, locksmith work (blowing bellows), trunk and box manufacture, and in book-selling; from 1 to 6 marks (25 cents to \$1.50) a month in bookbinding; from 1 to 12 marks (25 cents to \$3) in glass works, porcelain painting, lacquer work, and aiding wheelwrights; from 2 to 10 marks (50 cents to \$2.50) in cigar making; from 1 to 6 and 9 marks (25 cents to \$1.50 and \$2.25) as newsboys and errand boys; from 30 to 60 pfennigs ($7\frac{1}{2}$ to 15 cents a day) for setting up pins in bowling alleys. Working clay in potteries and washing bottles pay best, from 8 to 12 marks (\$2 to \$3), and from 10 to 12 marks (\$2.50 to \$3), respectively, a month.

In Schwarzburg-Rudolstadt, district of Frankenhausen, the delivery of journals and newspapers pays from 6 to 8.50 marks (\$1.50 to \$2.12 $\frac{1}{2}$) a quarter; setting up pins pays 30 pfennigs ($7\frac{1}{2}$ cents) an hour; in one case 40 pfennigs (10 cents) an evening (from 7 until 11 o'clock). Children who assist their parents at home in making buttons earn about 2 marks a week. In the manufacture of cordage (knitting, crocheting, weaving, and the like), children's wages in one locality (Mehrestedt) amount to 20 and 30 pfennigs (5 and $7\frac{1}{2}$ cents) a day during the winter season and to 20 to 50 pfennigs (5 to 12 $\frac{1}{2}$ cents) during the summer. In another locality (Schlotheim) only 6 to 8 pfennigs ($1\frac{1}{2}$ to 2 cents) a day, or 12 to 18 pfennigs (3 to $4\frac{1}{2}$ cents) a day, and in most instances less than 1 mark (25 cents) a week are reported for the same kind of work. The report of the district of Königsee, in Schwarzburg, states that despite the pittance of 15 pfennigs ($3\frac{1}{2}$ cents) a day, the father of a family can and must take these amounts into calculation, owing to the extremely low wages paid to adults generally.

The city of Greiz, in Reuss senior line, reports from 1.20 to 1.50 marks (30 to 37 $\frac{1}{2}$ cents) a week for employment during sixty hours in the manufacture of cigars. These amounts are not increased in vacation.

VIII. POLICE REGULATIONS CONCERNING CHILD LABOR.

Most States reported details of how child labor is restricted by police regulations.¹ These apply principally to the selling of wares in public streets, on squares, on doorsteps, in vestibules and open stairways, and to the employment of children till late at night for setting up pins in bowling alleys and to assist in public shows or to help in taverns.

In Prussia nearly all districts have adopted different measures directed against the employment of children during school hours and forbidding their working at night, late in the evening, and early in the morning. The limits of time vary.

¹ These facts refer, as expressly stated, to conditions at the beginning of the year 1898. Since then other more extended measures not mentioned in this summary have been taken to restrict child labor.

Furthermore, the selling of wares on the street or public places is either limited or altogether forbidden. Children are not allowed even to accompany peddlers. In some districts measures exist to protect children against some kinds of work. In Arnsberg children under 15 years of age are forbidden to work at sharpening needles, nor may any under 8 years of age be employed in stringing beads. The government of Düsseldorf allows the employment of school children at home only between the close of school in the afternoon and 7 o'clock in the evening (in the manufacture of articles of clothing and the making of match boxes). Finally, the assistance of children in all kinds of public shows is subject to restrictive laws.

Bavaria reports the resolution of the minister of the interior relative to child labor (children under 14) transmitted to the various authorities of the Kingdom on April 27, 1898. It reads:

As a result of the inquiries pursuant to the cabinet order of February 4 of this year it has been observed that, excepting in large cities and in cases of home industry, the employment of children under 14 years has given only occasional cause for police interference. But as a deplorable evil must be considered the employment of children till late at night for setting up pins in bowling alleys. In large cities children are overtaxed by delivering articles of food (milk, bread, etc.) and newspapers. Objection was likewise raised against the peddling of flowers and small articles of use, as well as against the protracted occupation of so-called "piccalos"¹ in taverns. The greater number of evil conditions in question can be remedied by applying paragraph 130c of the Imperial Code.² It is therein defined that employers who engage laborers under 18 years of age are bound to consider, in the arrangement of workrooms and the regulation of work, the special claims on health and morals which the age of such employees demands. In so far as the kind of employment and the length of hours may be prejudicial to children's health, the police authorities have the right to enforce the restrictive measures designed to prevent injury. In the same way interference is permissible in cases of occupation at home if anyone not belonging to the family is engaged. District police authorities are hereby directed to oppose the evils which arise from the employment of children in the manner prescribed. Relative to children's peddling, in pursuance of the ministerial resolution of February 7, 1898, regarding the execution of the imperial law (see Ministerial Organ, No. 7), section 5, and paragraph 30 of section 2, containing directions for execution, are to be followed exactly. Continual attention shall be given to the employment of children at home by their own families, and any particularly harmful effects noticed must be reported within a year. A copy of this resolution shall be sent to all industrial supervisors to insure their cooperation for the correction of the evils in question.

In Saxony the city councils of all four counties have issued police regulations against children peddling, delivering breakfasts before school, and setting up pins in bowling alleys till late at night. The limits of time and the ages mentioned vary. In Bautzen these occupations are forbidden after 11 p. m., in Dresden after 9 p. m., and in Neustadt after 8 p. m. In Pegau children engaged in these occupations must be at least 10; in Wurzen at least 12 years of age.

In Hessa police regulations have likewise been issued to prevent abuse of child labor. It is forbidden, for instance, to employ children in bowling alleys within the city.

In Saxe-Weimar a ministerial decree of May 5, 1897, based upon one dated March 20, 1875, defines that children shall not be employed in any kind of taxing home or field work until after school hours, and then two hours at least must be reserved for the preparation of lessons and recreation. For certain kinds of work they can not be employed at all, or not until their thirteenth year of age, and then only two hours a day.

In Saxe-Meiningen evils arising from selling bread and cakes in public places, setting up pins, etc., are checked by local regulations and by decree of the county

¹ A localism derived from the Italian, "little ones."

² This paragraph prohibits child labor in factories.

authorities, so far as this was permissible, by the ministerial decree of March 20, 1892, paragraphs 120a, 120b, Section XIV.

Saxe-Altenburg refers to the order of the city council of Eisenberg which permits children who are physically well developed to sell eatables and small articles of use from their tenth year up, though not without special permit from the city council. In Schmölln school children are absolutely forbidden to peddle and exhibit wares on public streets and places, on doorsteps, in vestibules and court-yards, as well as in public houses. (Decree of January 17, 1894.)

Schwarzburg-Sondershausen quotes the following order which pertains to the district of Arnstadt:

It is forbidden: First, that school children play any kind of music on the streets, in public places, and localities (hotels and taverns, restaurants, confectionery stores, theaters, and shows), present any exhibit, offer theatrical show, lecture, or other amusement, or be employed by others in such amusements and performances. If any higher interest of art or science be involved, local police authorities may make exceptions. Second, that children, unless properly attended, visit any public locality (places of amusement), during the performance of any kind of amusement whatever. The special rules prohibiting the presence of children at public dances are not referred to in this. Third, that school children carry around bread, cakes, fruit, petty wares, flowers, or other articles for sale, or receive presents on the street, in public places, taverns, or private residences, also children be employed to act as waiters in public places or at drinking stands. Any violation of this order on the part of the employer, as well as on the part of parents or guardians who allow this order to be disobeyed by any child under their authority shall be subject to a fine not to exceed thirty marks (\$7.14), or imprisonment.

In Schwarzburg-Rudolstadt children are forbidden by the orders of August 30, 1888, and September 3, 1889, to set up pins in bowling alleys or sell goods after 9 o'clock p. m. Hawking on the street and in public localities is strictly prohibited.

In Reuss, junior line, the following regulations are enforced respecting peddling, setting up pins, and industrial occupations:

I. In pursuance of the law on the authority of the police in decreeing punishment, dated June 8, 1864, and relative to the revised imperial industrial code of 1883, the following rules have been issued for the lowland districts: 1. The peddling of articles of whatever kind, whether on the street, in public places, or buildings frequented by the public is positively prohibited with regard to girls of school age; the peddling of such articles by boys of school age is allowed only upon special permit granted by the local police. 2. All those who, without permission from the local police, employ their own or other children in the above-mentioned occupations, or who allow children under their care to peddle, as well as innkeepers who allow children without a permit from police authorities to sell goods within their precincts are responsible for the observance of the foregoing order. 3. Violations against the order given under 1 are punishable by a fine not exceeding 30 marks (\$7.14) or imprisonment. 4. Considering the positively evil consequences of such vending to the physical and moral well-being of children, local police authorities are advised to limit the permits within their power to grant according to 1, and restrict them to the hawking and peddling of articles in common use when the said occupation is pursued as a local or general custom.

(Gera, May 13, 1884. Council of the principality.)

II. In pursuance of the law regarding police authority in executing punishment, June 8, 1864, innkeepers are hereby prohibited from employing children of school age later than 10 p. m. for setting up pins in bowling alleys, under penalty of a fine not exceeding 150 marks (\$35.70). Parents and guardians who allow their children or wards to be employed in setting up pins beyond that time are subject to the same punishment.

(Gera, November 5, 1892. City council.)

III. In pursuance of the law regarding police authority in executing punishment, June 8, 1864, the following orders are hereby issued in the interest of the common weal: 1. During the hours before school in the morning children may be employed outside of the homes and shops of parents only in light domestic work, but in no case in industrial occupations. Only in very exceptional cases, but never as a rule, may children stay overnight in the homes of their employers. 2. Any remuneration in money for the services of school children shall not be paid

to these, but to their parents or guardians. 3. Violations of these orders by parents or guardians, and employers, are punishable by a fine not exceeding 150 marks (\$35.70), and in case of nonpayment, by imprisonment.

(Gera, August 5, 1897. City council.)

In Bremen children under 15 years of age are prohibited from assisting in free or public musical or other entertainments and shows later than 10 p. m.; furthermore, children under 14 years of age are not allowed to peddle on public highways or in public places.

In Hamburg, since June 28, 1897, children under 12 years of age are prohibited from being employed in restaurants and taverns later than 8 p. m.; those above 12 years, later than 9 p. m. Other police regulations refer to child labor by separate mention. In 1869 children of school age were prohibited from assisting in public shows (exceptions granted); in 1891 children were forbidden to sell any wares publicly; in 1893 the selling of articles by children in taverns was forbidden; in the same year the employment of children in shooting galleries and merry-go-rounds at Christmas fairs was forbidden. By a decision of the Hanseatic supreme court, a police order of July 16, 1897, forbidding children to deliver newspapers and fresh bread early in the morning was declared null and void.

IX. PROPOSITIONS FOR THE FUTURE REGULATION OF INDUSTRIAL CHILD LABOR.

The reports from the States of Bavaria, Saxe-Coburg-Gotha, and Saxe-Meiningen are the only ones expressing opinions as to how improper child labor may be restricted in the future. The government of Meiningen declares it imperative that industrial child labor be regulated and restricted by imperial laws. Bavaria remarks that in so far as evil consequences of child labor necessitated official interference, such based on paragraph 120c of the imperial industrial law had been successfully attempted. Nevertheless, the interference of police authority was excluded in cases of employment of children at home where most of them belonged to the family. The supervision of the occupations in question offered almost insurmountable obstacles, and the oft-attempted cooperation of official inspectors had met with little success in families. Moreover, because of the very precarious circumstances of those engaged in home industry the greatest caution must be exercised with protective measures for children forming a part of the working family. At all events the absolutely necessary protection of children against danger to health is to be recommended for federal or imperial legislation.

In the report from Saxe-Coburg-Gotha the opinion of the factory inspector was quoted. In his estimation an essential amelioration, if not complete correction of the evil consequences of home work with children might be effected, if their employment (a) would not begin before the close of their ninth year of age and be subject to the consent of a physician; (b) if it would not begin early before school hours; (c) if it would not continue longer than four hours a day; (d) if it were interrupted by recreation or work in the open air; (e) be confined to appropriate places; (f) be under parental supervision at home and not in common among strangers in strange houses; (g) if it be prevented from serving as a pretext to keep children out of school, parents often making use of the excuse that "the child is sick."

3. SUPPLEMENT I.

REGULATIONS CONCERNING INDUSTRIAL OCCUPATION OF SCHOOL CHILDREN IN SOME FOREIGN COUNTRIES.

The restrictions of industrial occupation of school children in the countries under consideration are, in part, connected with the public school laws, and are principally intended to aid the schools generally and school attendance specifically whenever practicable. Furthermore, prohibitory or restrictive measures are

enforced with regard to industrial labor of children in general, or to certain kinds of work that endanger the physical, mental, or moral development of children. The last-mentioned regulations are enforced where industrial work is performed in easily recognized, well-defined labor precincts, i. e., in factories, workshops, etc. The employment of children in factories and like places, such as mines, foundries, wharves, etc., that come under the protective labor laws of Germany, is not considered in the inquiry in question, and legislation in foreign countries relative to such employment is therefore not discussed. However, it should not be forgotten in what follows that the term "factory" in foreign laws has not the same significance as in our industrial law. Consequently the foreign "factory laws" could not be set aside altogether; while, on the other hand, the regulations referring to the employment of children in mining, concerning which special laws have, as a rule, been enacted are not mentioned herein at all.

The main point to be shown is, to what extent industrial occupation of children in petty industries and labor at home—as in trade, commerce, restaurants, and taverns—is restricted in foreign countries; that is to say, in countries of advanced industry. For, as the following quotations show, several countries have decreed significant restrictions of wage-earning by children not only in industry proper, but also in workshops, and in more than one instance in other branches of wage-earning, besides productive labor. On the other hand, it is apparent that still many kinds of work are not affected by these measures; for instance, the employment of children outside of labor centers to deliver newspapers, bread, and the like, or to sell flowers, matches, and other articles on the street or in public places. As numerous abuses in the employment of children are in Germany prevented by simple police interference, so this may be the case in other foreign countries. How much misery is thus prevented in other countries can not be stated without previous comprehensive inquiry any more than the same can be estimated in any other way within the States of the German Empire.

I. ENGLAND.

The English factory and workshop act (41 Vict., c. 16) of May 27, 1878, supplemented later and partly changed by the amendments of August 25, 1883, August 5, 1891, and July 6, 1895, includes, besides restriction of employment in the general interests of children, also regulations defining a certain degree of compulsory education for children employed in factories and workshops, as these terms are used in the law, which class of children were accordingly obliged to attend school before a like obligation in general was recognized in England. Obedience to these provisions, still in force, has been made a condition of industrial wage-earning occupation.

The following restrictions are decreed by the factory and workshop act: Children under 11 years of age shall not be employed in factories and workshops. Older children up to the age of 16 may be admitted to factory labor only if they possess a physician's certificate stating their physical ability to perform factory work. This last regulation may be extended to workshops when protection of the health of the children employed seems a necessity. Further restrictions apply to the employment of children and young persons in special places of work, such as mirror and white-lead factories, glass manufactories, and brick kilns, etc.

As far as the employment of children is permitted by the law alluded to, it may follow the "system of half-timers," of employment in morning and afternoon sets, or of employment on alternate days only. The beginning and close of working hours, intermissions for meals, the change of sets and particularly work on Saturday, are accurately regulated. According to circumstances, working hours may reach as high a figure as 56½ to 60 hours every two weeks. In workshops the hours of half timers in general are limited to 6 or 7 o'clock a. m. and 1 p. m., and between 1 p. m. and 6 or 7 o'clock p. m. When children work on alternate days, they begin at 6 or 7 a. m. and end at 6 or 7 p. m. However, no child is

allowed to work more than five consecutive hours without at least a half hour's intermission.

In addition to these, the following regulations apply to the education and schooling of children under 14 years of age employed in factories or workshops. In cases of half-timers, children must attend school at least once every day in the week. In cases of employment by sets, they must attend school twice on every day preceding a workday. Employers are prohibited under penalty of fine from giving work to any child who has not fulfilled the obligation of attending school the week before. All employment must cease until the time of absence from school has been made up. Every Monday employers must receive a certificate from the respective teachers attesting the school attendance of the children they employ, and they are not allowed to give any work to those who have no satisfactory report of school attendance. The only exceptions to these obligations are children 13 years old who possess a school certificate that may be given on completion of a certain amount of study, or at the close of a certain time of attendance according to special school regulations.

The regulations mentioned extend beyond factories, as the factory and workshop act applies to very small shops in so far as they possess what are defined in the law as partly general, partly special characteristics. In consequence the law would include the workshops of nearly all industrial production in the broader sense of the term, namely, all places in which work is done for business or profit, to make, alter, improve, or decorate wares or prepare them for sale. Home labor for business purposes is not excluded altogether, but special regulations apply to the so-called domestic workshops, namely, such work as is done without any mechanical motor by the members of the family living in the place where the work is performed. In these cases children may be employed according to the half-time system, either in the morning between 6 a. m. and 1 p. m., or in the afternoon between 1 and 8 o'clock (Saturdays till 4 p. m. only), but not longer than 5 hours continuously, and must observe the law of school attendance mentioned above.

The introduction of general compulsory education in England has been gradual. It is only since the elementary-education act of August 26, 1880, supplementary to the laws of August 9, 1870, and August 15, 1876, that the local school boards and school-attendance committees are required to issue statutory regulations for the attendance of children within their districts. Some general points are, nevertheless, regulated by the law. Thus, according to the laws of September 22, 1893, and July 13, 1899, children under 12 years of age are not allowed to be employed even as half-timers if they are thereby prevented from receiving elementary instruction. The employment of children over 12, and accordingly their total or partial absence from school, is permissible if they possess a certificate that they have taken the studies required by the school law. The regulation applies in full to all manufacturing industry, not to agriculture.

In some branches of industry child labor is regulated by special laws—as the coal mines regulation act of September 16, 1887; the metalliferous mines regulation act of August 10, 1872; the pawnbrokers' act of August 10, 1872; the shop-hours' act of June 28, 1892, and the chimney-sweepers' acts of 1840, 1864, and 1875.

The prevention of cruelty to children act of August 17, 1897,¹ is designed to protect children against abuses and neglect on the part of parents and guardians. One section is devoted to the restriction of the employment of children in wage-earning. Begging, singing, playing, selling articles of merchandise, and like occupations are forbidden. Whoever allows or forces any child (boys 14 years old, girls 16) under his or her care to be present for the said purpose on streets, in public buildings, in squares at night (between 9 p. m. and 6 a. m.), in public localities where spirituous liquors are served, and in public places of amusement, shall be punished by a fine not exceeding £25, to which three months' imprison-

¹ An older law of the same title was passed as early as 1891.

ment may be added. This law similarly forbids the training of children in the age mentioned for dangerous performances (acrobatic and circus performances, etc.), while an older law—the children's dangerous performance act of July 24, 1879—had already prohibited like employment of children under 14 years of age.

Many complaints are made against the laws mentioned, especially that their execution leaves much to be desired and that existing evils require further reformatory measures.

II. FRANCE.

The law of November 2, 1892, by which the industrial occupation of children and women is regulated, contains the following regulations concerning the employment of children:

As a rule, children may not be employed in the work that comes under the law until they have completed their thirteenth year of age, when obligatory school attendance ceases. (Law of March 28, 1882.) However, the employment of children at least 12 years old is permitted, if they have a certificate for completion of the elementary course of study required, and physician's certificate stating that they are physically able to work in factories. Factory inspectors have the right at all times to have children under 16 examined by a physician and to effect their dismissal if the conclusion is unfavorable.

Children under 16 whose employment is permitted are, like those older, allowed to work ten hours a day at most. Until their eighteenth year night work, namely, between 9 p. m. and 5 a. m., is prohibited; besides, one day of rest during the week and the observance of legal holidays is prescribed.

In regard to day work, as well as to many kinds of labor specified as unhealthy or dangerous, the employment of children is regulated by special orders.

The application of the law of 1892 extends to all industrial establishments, as well as to factories, mines, foundries, yards (*chantiers*), and small workshops (*petits ateliers*); only those work places are excepted in which members of the family alone work under the supervision of father, mother, or guardian, if no mechanical motor is applied and the work is not considered dangerous or unhealthy. On the other hand, there are many kinds of industrial labor the work places of which (in trade and commerce, stores, offices) are not specified in the law and are therefore not subject to the prescriptions mentioned.

In a report of the "commission supérieure du travail dans l'industrie," based upon the statements of factory inspectors for the year 1898, the law is stated to have been efficacious in bringing about rather good results independent of many evasions made possible by the exceptions granted. Conditions manifest very decided progress since its application.

A great improvement has been caused by the supplementary law of March 30, 1900, which defines the longest workday to be eleven hours for all persons under 18 years of age, and directs that two years after its passage the workday is to be shortened to ten and one-half hours and two years later to ten hours. Consequently, on April 1, 1904, a workday for children under 18 will be ten hours.

In pursuance of the law of 1892 and one of December 7, 1874 (relative à la protection des enfants employés dans les professions ambulantes)¹ special provisions apply to the employment of children in shows. If under 16 they may not be employed to execute dangerous tricks; neither may they appear with traveling companies, unless under direction of parents, from their twelfth year on. The employment of children under 13 in theaters and concert halls where regular performances take place, is not permitted. Certain performances are excepted. Besides, the law of 1874 prohibits the employment of children for regular or systematic begging.

¹ Modified by the law of April 19, 1898, on the prevention of violence, beating, acts of cruelty, and other crimes committed against children.

III. AUSTRIA.

In Austria compulsory school attendance begins with children in their sixth year and continues till their thirteenth; still, after six years' attendance, absence is granted for half days, special days, and certain seasons.

According to the industrial code, children not under 12 (in factories not under 14) may be employed "for regular industrial occupation" * * * "provided their work is not injurious to health and does not prevent physical development and the fulfillment of the legal obligation of school attendance." However, they are not allowed to work longer than eight hours a day, and night work is prohibited (between 8 p. m. and 5 a. m.). In regard to night work, exceptions may be granted by ministerial decrees, in pursuance of which, among other occupations, boys are permitted to work as waiters till midnight.

As is seen from this measure, the Austrian regulations are not limited to manufacture or factory work. The industrial law applies rather to "all industrial or wage-earning occupations, whether they refer to production or remodeling of articles of trade, the pursuit of business, or the discharge of service and other labor."

Certain industrial occupations are excluded by the provisions of the industrial code, and special laws apply to them, such as agricultural and forest production with their dependent industries, mining, and others that might be enumerated; the publishing and printing of periodicals and their sale; public shows of whatever kind; furthermore, customary day labor, peddling, and (as the amendment of 1883 states) "the whole of home industry."

The term "home industry" was at the time explained in a ministerial order; the term expressed primary or secondary industries for which the work is done, according to local custom, in workshops only with the help of members of the family. But in time this definition for the earliest development of home industry in Austria was no longer suitable, and often doubts arose as to the legal position of respective employees. The term "factories" has likewise been explained by a ministerial decree; the characteristics of such are defined as being the usual employment of more than 20 workmen, the use of machines, both as motors and tools, the manner of division of labor, and the position of the proprietor. As is evident from what has been said, the protective regulations specified, exclusive of the more severe ones for factories, have a very extended application to small industries and trades. On the other hand, the Austrian law of prohibition of child labor refers, of course, only to "regular" occupation.

Among other laws, excepting the industrial law, that relative to mining (June 21, 1884) contains protective measures for children which do not come under consideration here. What has been said of England in regard to restricting wage-earning occupation of children applies to the Austrian laws; they are seldom observed in practice and often seriously sinned against. The causes for these sad facts are frequently found in the economic and moral conditions of the poorer classes among whom parents do not want to, or can not, support their children, partly because of poverty and partly because of indolence. (Social administration in Austria at the close of the nineteenth century, Vol. I, Social Economy, Vienna, p. 47.)

IV. OTHER COUNTRIES.

Legislation in other countries can only be touched upon here. Only such countries will be considered as have introduced compulsory education: Switzerland with different terms in the 25 cantons; Italy, for children 6 to 9 years of age; Sweden, as a rule, from the seventh to the fourteenth year inclusive; Norway, throughout seven years between the ages of 6½ and 15 years.

In Switzerland the law of March 23, 1877, regulates uniformly for all the can-

tons only the work in factories, in which the employment of children under 14 is positively prohibited. According to the standard maintained by the Federal Council, the term "factories" includes not only all places of manufacture with more than 10 workmen, but even places with only 5 workmen where mechanical motors are installed, or where the work implies certain dangers to the health and life of the employee, and, finally, even the smallest places if they present extraordinary dangers to health and life or show the unmistakable character of factories. Besides these general regulations, there exist in a number of cantons cantonal protective labor regulations which affect a wider range of labor, such as small industries, stores, etc. They refer principally to woman labor, but also contain measures for the employment of children, especially male and female apprentices in workshops. Thus, for instance, in a number of cantons (Glarus, Lucerne, Soleure, St. Gall, Zürich), the order has been issued that girls under 14 must not be admitted into workshops which, not being affected by the federal factory law, employ women and girl apprentices.

In Italy, where protective labor legislation is backward, the protection of children is less significant than in other countries. In pursuance of the law of February 11, 1886, and the order for its execution of September 17, 1886, children under 9 years of age are not allowed to work in factories; that is to say, in places where mechanical power is applied or at least 10 workmen are employed. Older children are admitted only if they hold a certificate of physical ability. Besides, certain kinds of work declared to be dangerous or unwholesome are prohibited, or allowed only on conditions. The length of hours, as well as night work, is subject to limitations.

In Belgium the law of December 13, 1889, respecting woman and child labor forbids the employment of children under 12. The application of this law is extended not exclusively to factories in the narrower sense of the term, but to mines, quarries, yards, harbors, wharves, transport establishments, theaters, laundries, and other places, and especially to a large number of occupations enumerated in the law as dangerous or unwholesome (*établissements classés comme dangereux, insalubres, ou incommodes*). Only those employments are excepted in which members of the family exclusively are engaged by parents or guardians and with which no mechanical power is applied, provided they are not considered dangerous to life and health. This law has extended application; it includes nearly all (large and small) industrial plants specified as dangerous or unwholesome, establishments, too, which would be classed among workshops in Germany and England. An order, dated February 19, 1895, for the execution of the law, extends the prohibition of certain occupations likewise to children over 12 (till the fourteenth or sixteenth year of age). The number of working hours per day and their distribution is regulated exactly, partly in the law, partly in the ministerial order. As a general thing boys under 16 may be employed twelve hours at most; night work (from 9 p. m. till 5 a. m.) is forbidden for them; furthermore, certain intermissions and days of rest are prescribed. An older law of May 28, 1888, protects children employed in ambulatory occupations. They are forbidden also to be employed for dangerous feats, as acrobats, tight-rope walkers, etc.

In the Netherlands the labor law of May 5, 1889, which includes all small manufacturing plants and home industries, prohibits the employment of children under 12. All dangerous or injurious occupations are forbidden, or are permitted only on condition to older children (persons under 16 years of age). The working hours shall not exceed eleven, and not be arranged between 7 p. m. and 5 a. m.; in exceptional cases work is allowed until 10 p. m.

In Sweden the law of November 18, 1881, defines that children under 12 years of age shall not be employed in factories, in trades, or other occupations. In factories children 14 years old or less are not allowed to work more than six hours a

day; night work is totally prohibited. This law has been but partially successful. A new law on the employment of children and women, which was passed by the legislature in 1900, has not yet been accepted by the Royal Government. The employment of children (boys under 14, girls under 15) in public shows has been prohibited by a royal order of December 10, 1897. Furthermore, the order of December 4, 1896, as well as one prior (June 10, 1891), prohibits children of the same age from selling certain articles (flowers, papers, etc.) on the street or in public places between the hours of 8 p. m. and 8 a. m.

In Norway a protective labor law was passed June 27, 1892, which, in imitation of similar laws in large countries of western Europe, introduced, to a certain extent, socio-political legislation in Norway. The law refers to all industrial plants in which a greater or less number of workmen are employed regularly and at the same time; also to all trades and various other branches of industry, if carried on "on factory lines." In cases of doubt, the supervisory authorities decide whether a manufactory comes under the law. The employment of children under 14 is forbidden in the places specified. If, at the ages between 12 and 14, they hold a physician's certificate of ability, they may, with the consent of the supervisory authorities, be employed in light work six hours a day. Certain dangerous occupations (at machines) are altogether prohibited for them. According to the law of August 6, 1897, children under 14 are also forbidden to work in bakeries. Besides, the public school law of June 26, 1889, contains regulations by which all employers are forbidden, under the penalty of a fine not exceeding 100 crowns (§26.80), to employ children between 6½ or 7 and 15 years of age, at such hours as to prevent their attendance at school or their preparation of studies.

In Russia protective regulations relate principally to factories.

SUPPLEMENT II.

DISCUSSION.

Concerning the subject of wage-earning children, a daily paper in Berlin (*Tägliche Rundschau*, No. 275, 1899) contains an article, a translation of which is added to the foregoing official statement, because it discusses the details of child labor frankly and openly, partly also because it may lead readers in America to understand the social misery which industrial, agricultural, and commercial competition has caused in recent years all over Europe.

Dr. Wiese, the author of the article, quotes the imperial law of 1891, which provides that in factories and shops, as well as in mines, children of school age, or, rather, children under 14 years, shall not be employed; that children between 14 and 16 shall not be employed for more than ten hours a day, and not during the night (between 8.30 p. m. and 5.30 a. m.), nor on Sundays or holidays. The Bundesrath, or Federal senate, has the right to prohibit wage labor of women and children in especially dangerous kinds of employment; that is, dangerous to life, health, or morals. The law further provides for an obligatory factory inspection, aside from the customary police inspection. There are at present (November, 1899) 300 of such professional inspectors, all scientifically and technically trained; in some German States women inspectors have been employed. Especially important is the fact that the imperial law does not permit any exception whatever, and forbids peremptorily all employment of school children in factory and shop labor.

It is interesting to see whether the law is an actual protection of the weak. The school census of 1899 in Berlin, instituted by the school authorities, revealed the fact that 25,394 school children are employed in some sort of wage-earning labor, namely, 17,636 boys and 7,758 girls. It was found that 11,091 children were engaged for more than three hours a day. The total number of school children (6 to 14 years of age) in Berlin was 231,362; hence about 11 per cent were wage earning. It is true that these children are not working in factories, but they are breadwinners nevertheless. The teachers have been active in urging the authorities to suppress child labor, and they have proved from reports of the Prussian industrial councilors that child labor has increased throughout the State, especially in home industries, to an extent of which the public has no idea. These con-

ditions have led to interference on the part of the provincial government. Several Prussian industrial courts have repeatedly given utterance to protests, without thus far being able to mitigate the evil.

The comprehensive reports of the school inspector for the district of Minden, called for by the imperial chancellor, deserve special attention. In this district, in 1,939 school classes, with an attendance of 105,407 children, 10,326, or 9.8 per cent (6,016 boys and 4,310 girls), were wage earners; 5,872, or 5.57 per cent, were required to work longer than three hours a day. The majority of wage-earning children, namely 5,863, were employed in cigar making, an industry conducted on a large scale, especially in Hertford. Of these latter not fewer than 3,551 were obliged to work longer than three hours a day, and 3,006 were employed longer than three hours for every day of the week. The conditions in Minden prove beyond all contradiction how little good has been effected by the prohibition of factory labor alone. In 1890 as many as 1,797, and in the following year as many as 1,883, children were employed in cigar factories. In the year 1896, owing to the passage of the protective labor law, only 11 were thus engaged and since then there have been none. Instead, however, home industry has developed and is carried on principally through child labor, the incredible extent of which is made apparent in a table giving statistics of separate classes in schools of Halftern, Ostscheid, Overnbeck, Spenge, and Vlotho, small communities in the district of Herford. These five schools, collectively, number 1,461 children, in 23 classes. Of these 721 are employed in cigar making, 531 working longer than three hours on every week day. In the upper two grades of the five schools there are 649 pupils of whom 379 are engaged in cigar making, 353 of whom working longer than three hours every week day. Even pupils of the lowest school grades are employed in this notoriously unhealthy occupation, a considerable number working longer than three hours a day regularly. In view of these deplorable conditions the chamber of commerce in Minden has proposed a regulation, to wit: "Home work in the cigar industry shall only be performed by adults." Even if the execution of such a rule were under strict supervision a prohibitive measure like that would have no other result than that cigar making would be replaced by a different industry, perhaps less remunerative and utilizing child labor to even a greater extent.

The root of the evil lies in the fact that the father of a large family of children must compete with single men. In this respect legislation must act as it does in cases of old age and infirmity. Legal prohibitive measures, limiting or forbidding specially harmful forms of child labor, would not be superfluous; on the contrary, they could be carried out strictly according to letter, so that no equally great or even greater evil than the one abolished need be anticipated in its stead. (*Pädagogische Zeitung*, No. 36, 1900.)

Reports on child labor in other parts of the country are most discouraging. The facts brought to light by factory inspectors are such as demand stringent legislation. The effort to cheapen labor often lays burdens on children that are in startling disproportion to their physical strength. The report of Wurttemberg shows that the detrimental consequences of working children overtime are felt years afterwards. The population does not come up to the same standard of physical stature and strength, and consumption has increased to a notable degree. In Saxony, in the district of Bautzen, school children even have been employed for breaking stones. Independent of the disturbing influence on education and health, child labor creates competition for men which, in consequence of cheapness, prevents their earning better wages, so that the original expedient of assisting fathers by child labor becomes a permanent practice.

Political or legislative measures are absolutely necessary for these evil social conditions. Police regulations could, first of all, bring about a change. Home industry likewise needs protective legislation, and that implies the great question to be solved concerning the occupation of children of school age. The prohibition of factory work for such children, provided for in the imperial industrial code, must be more minutely defined to be adaptable to existing evils.

In Austria the law can easily be evaded in every instance. It is true, children may not be engaged in all industries, but exceptions can always be made. The maximum length of a workday for children 12 to 14 years of age is eight hours. The prohibition of factory labor under 14 years and night-work also "admits of exceptions." The same may be said of children working in mines; if 12 years old, they may form exceptions. Illegal extension of working time and deficient execution of the regulations applying to school attendance of child wage-earners or apprentices are often deplored by Austrian officials and provoke action against unscrupulous employers.

No country boasts more loudly of its socio-political laws than England. Let us see how facts correspond to legislation. Children under 11 years can, under no

circumstances, be employed in factories and shops. When necessity demands, the employer is held responsible for the required school attendance of their hands from 11 to 13 years of age; above 13 years children must hold a school certificate before they can be employed; persons between the ages of 11 and 16 may be employed in factories if they conform to the regulations of the home secretary, and in workshops if they hold a physician's certificate of health. In textile factories children may not be employed for more than one-half of the 56½ hours per week defined for woman labor, as they are not allowed to work more than a half day, or a whole day on alternate days. In work at home, children's time is limited to half-days from 6 a.m. to 1 p.m., or from 1 p.m. to 8 p.m. In mines, boys under 12 can not work under ground, and in coal mines children under 12 can not work at all. The length of time is fifty-four hours a week under ground at most for boys from 12 to 16 years of age. For children 12 to 13 years old, the work over ground must not exceed ten hours a day. If they work more than three days in the week, six hours is the highest limit per day. In shops—namely, places of sale of all kinds, including hotels and excepting pure family industries, according to the law of 1892, persons under 18 years of age may be employed only seventy-four hours a week, including intermissions. Industrial inspection has been in existence since 1833. At present 114 officials are appointed for 200,000 factories and shops and one-half a million of laborers.

Whoever thinks that despite these laws child labor is made use of to a smaller extent than on the continent, is mistaken. For example, in England 114,025 children under 14 years of age work from 72 to 87 hours a week. At the conclusion of last year's address to the House of Commons, in which the department of education requested an appropriation of nearly 180,000,000 marks (£9,000,000 or \$45,000,000) for educational purposes, the under secretary of state, Sir John Gorst, himself stated that there are boys not yet 12 years of age who are obliged to work 100 hours a week. Others of these "white slaves," as he called them (17,084 in number), work from 72 to 87 hours a week for less than 12½ cents per week, others receive \$1.75. Again, 181 children regularly employed are not 6 years old, the age defined by law for school attendance. Such a utilization of child labor is only possible on account of the "half-day law," which provides that children may work half a day if they spend the other half in school. As many children are dismissed from school as early as 10 years of age, namely, if they can pass an examination covering all that is taught in elementary schools of England, which is very little, and as they come under the labor law only later on, parents make use of just these years for the greatest amount of labor, and often most inhuman labor. Sir John Gorst, moreover, remarked that of 5,000,000 children of school age over 1,000,000 did not attend school. If no criticism on such conditions can be too severe, the kind of labor exacted from children calls forth even sterner judgments. Boys are required to spend hours, and even whole days, watching teams, while the driver is attending to the loading and unloading of the wagon. If such occupation is continued for weeks and months, the boy naturally develops into an idler or idiot who prefers to beg later on.

In the large cities of Germany, too, especially in Berlin, boys of school age are often employed in the business of transportation, as so-called "Rollmöpfe" (team watchers). Observations made by teachers of that city show that the police allow such things with indifference. Daily contact with nearly always rough drivers corrupts boys in an alarming way; it leads to coarseness in expression and manners and accustoms the boys to drink, while exposure to wind and weather undermines the health of such pitiful creatures only too often scantily clothed. The same applies to making use of children for agricultural labor. In itself this is calculated to benefit rather than harm children. But who is to protect them against the coarse and immoral conversation and manners of farm hands and the temptation to drink? The curse of child labor is not always the work itself, but oftener and almost exclusively the absence of care for the physical and spiritual welfare of children during work.

Furthermore, if in England—and complaints in this respect are numerous—girls pass all the day on the street, spending their valuable time in carrying messages, uncared for and unadvised, they develop the dangerous inclination of wandering about that no philanthropic efforts later on can root out, and that slowly leads them to their destruction. As in these cases, mind and soul are gradually deadened, so, in others, the physical constitution is weakened, if not ruined, by systematic wear and tear. In one instance, in London, a boy 13 years old was obliged to work thirty hours a week in a pool room for \$1; in another instance, a boy was required to assist his father by hard labor in keeping a provision stand; he worked from 3 a. m. till the opening of school and from the close of school until 9 p. m. The most distressing sight, however, is to see school children employed as street cleaners, working all night, from 8 p. m. till 6 a. m. All their moral and physical

energy seems to have been exhausted when they come to school. What a sad kind of citizenship is to be expected from them when they grow up, if they ever do.

Italy and Spain have large numbers of cripples and beggars. While in the former there is some mention on paper of protection of children, not even this much can be found in the latter. If we ask where Italy gets her many cripples and beggars, the answer is given, by the white slaves employed in the sulphur mines of Sicily. The fact is well known and has been repeatedly discussed that boys of tender years are required to carry heavy sacks of sulphur up small ladders. The lowness of the tunnels forces them to stoop constantly, and a few years suffice to bend the tender limbs. Mercilessly driven out when they are unequal to the task imposed, and incompetent for any other work, they increase the countless hosts of beggars the sight of which is repulsive. The Government can find no remedy at hand for this public nuisance. There is but one—a positive prohibition of child labor and its effectual execution. But then what would the mine owners say and do?

In sunny Andalusia children under 8 years of age supply the deficiency of water in the conduits. Eight hours a day they carry heavy buckets of water on their heads into the fields in order to protect the germinating seed against drying up. The worst lot, however, falls to the children of Catalonia. The pen almost refuses to picture the barbarity practiced by employers on the tender bodies of children and with the full knowledge of the Government. Thousands of children under 6 years of age are daily employed in the magnesia mines. The tunnels are so low that grown persons can not enter them; so the youngest and smallest children are hired for the work. The poisonous vapors generated in the mines produce a frightful disease, "colica saturnans," which claims its victims daily and rages as an epidemic during certain times of the year. Still the mine owners continue to employ little children for this horrible labor, giving them but a small pittance in return.

It is seen from the foregoing that many countries of Europe possess laws for the prohibition or restriction and regulation of child labor, but that these laws are not put in force; that some kinds of work, as that connected with home industry, are not sufficiently protected; and that others, again, have no provision at all for the protection of children. It is to be hoped that the time is not far distant when all countries will remember their sacred duty for their own interests and protect children against unscrupulous parents or greedy capitalists. Until this happens it will be necessary again and again to draw public attention to the facts, arouse public conscience, and spread information on so highly important a question over as broad a field as possible. It is one which in the end affects the well being of the State, which must have an interest in the development of a strong and sturdy youth, for it is they who will have to meet the claims of later life. Hence in protecting the children the State protects itself.

IX. THE GERMAN LIBRARY SYSTEM.

Praiseworthy as the educational system of the German Empire may be, and unquestionable as its results prove to be, there seems to be a weak spot in it which is well-nigh incomprehensible to the American and English observers. It is the fact that comparatively little is done in maintaining public libraries such as are supported by local taxation in the United States and in England. This auxiliary to the nation's educational institutions is still in its infancy in Germany. Not that they have no large libraries in that country; but they are old university libraries reserved for the students, royal or State libraries, or venerable provincial libraries closed to the general public; there were, not many years ago, even extensive city libraries in which rarely any other footfall than the librarian's and his assistants' were heard. In late years, however, efforts are being made to supply the deficiency, and notable librarians, like Prof. C. Nörrenberg, of Kiel, and Prof. Ed. Reyer, of Leipzig, are making themselves heard in behalf of the rights of the great majority of the population, claiming that the public should have access to the enormous library treasures heaped up in State, provincial, and university libraries, and voicing the desire of the people for wide-open town and city libraries.

A quarter of a century ago the profession of a librarian as an independent profession was unknown in Germany. When in America and England professional librarians had long been numerous, in Germany the custom was still to intrust a professor or teacher in annual rotation with the care of the library of an institution. A change has come over the people, and after the model of Americans and Englishmen they began to apply local self-government to the question of public libraries. At first numerous cases of private enterprise showed the way; then many city and town governments, prodded by public-spirited men, appropriated money annually for the establishment and maintenance of such institutions. The management of large libraries, hitherto closed, changed also, and the millions of books that had been collected for centuries were slowly made accessible not only to students but to the general public. In all publications on the subject in Germany again and again the United States are set up as a model for imitation.

Recently a work has been published in Germany by Dr. Ernst Schultze on *Free Public Libraries, People's Libraries, and Reading Rooms* (pp. 362, with numerous illustrations). In this work the author lays bare the weakness of the German library system, and with constant reference to conditions and institutions in the United States and England, as well as other countries, he advocates a reform which is sure to come. He does not spare his language, but reports the facts, both positive and negative, without regard to the uneasiness he may cause to conservative institutions or to legislators and officials who fail to see the rights of the people to the freest possible access to the world's intellectual treasures.

Mr. Thomas E. Maw, librarian in King's Lynn, England, subjects the book to a critical review in the *Library World* (London) and quotes the author copiously. This review is here inserted:

One would imagine that the nation of thinkers and poets, a nation enjoying the highest and best of modern elementary education, and a nation which points with pride to a State whose people are the best educated in the world, would have no need of such an enthusiastic advocate of the public library cause as Dr. Schultze.¹ English and American readers unfamiliar with Germany will be surprised and puzzled at the existing state of affairs in the German library world, for it is generally believed in Germany and England that the "Volksbibliothek" is very much like the "public library," and the number of Volksbibliotheken is large enough to confirm our belief that Germany is always trying to get ahead or to keep abreast of others. The author points to the folly of raising monuments to the memory of their great writers when their works are unknown or forgotten by the people, owing to lack of opportunity for reading them. He also calls upon the nation to have a fitting Gutenberg celebration "by making it possible for books—living witnesses of this world-changing discovery—to be read by everyone, even in the remotest hamlet, instead of feasting, carousing, and parading with Chinese lanterns." That the old German appetite is potent enough to hinder the progress of education and culture is evident. "As I write these lines I am informed that a German university town which in many ways takes high rank, and which also has a large working-class population, is going to celebrate the matriculation of the one thousandth student. The municipal authorities had previously decided to show their appreciation of the growth of the intellectual life of their town by establishing a public reading room, which had long been projected, but which all private efforts had been unable to effect. But what did the city fathers do? They thought the one thousandth student could not be welcomed in a worthier manner than by filling him with strong drink. And how much was voted for this object? One hundred and twenty-five dollars, or even \$250? Oh, no; not at all—but thrice that amount, \$750! The reading room remains a project—to commemorate the intellectual importance of the town!"

Dr. Schultze lays stress upon the rights of all men to share in the national treasure—good literature. "Who has the effrontery to say," he asks, "that it is good for him to read, but at the same time fears that reading would be dangerous for his uneducated brother?" That there is a strong craving for reading of some kind he amply demonstrates. Small libraries have had their stock quickly used up, and

¹ Dr. Ernst Schultze. *Freie Oeffentliche Bibliotheken, Volksbibliotheken, und Lesehallen*. Pp. 362. Illustrations. Jannenberg, Stettin. 1900.

are unable to replace worn-out books, and the enormous sale of sensational trash of the worst kind is an evil only to be remedied by the supply of pure literature by means of public libraries, for all legislative attempts to suppress such productions have been ineffective. The author, with enviable optimism, believes the public library to be a panacea for most of the existing evils. "The uneducated workman who knows nothing of life but the dusty factory, the ill-ventilated sleeping room, and the reeking tap room, can not understand what is meant by the State, and can not believe that it has any right to exist." Immorality and crime, the daughters of drunkenness, will go the way of anarchy if reformers turn their attention to providing counter attractions to the public house in the shape of good literature. Dr. Schultze regards the public library as essential to any complete system of national education. Not only does literature raise the standard of the worker as a producer, but it enlarges the spiritual and mental horizon, and, what is of great importance to a German, either calls into existence or strengthens the deepest feelings of patriotism. The building of a public library is one of the finest and noblest monuments they could raise in memory of the heroes who had given their lives for their country, for "on entering the library * * * he sees the names of those who fought for freedom and right, and he must surely receive a strong impulse to read the history of his own nation, and thereby learn to love his country more and more. I can think of no war memorials more likely to really serve their purpose than these public libraries."

Dr. Schultze does not enter into the details of library management, but gives merely a brief outline of the methods of working which he has seen in the English public libraries. His chief concern is with the crying necessity for the establishment of public libraries in Germany and the satisfactory results achieved in England and America. He condemns, in no half-hearted way, the effete institutions known as Volksbibliotheken (literally, people's libraries), and asks for a library which will supply the pressing needs of all classes to-day. "The Volksbibliothek movement in Berlin has considerably influenced the movement throughout Germany," so it will be well to see what has been done in Berlin if we are to judge of the future prospects of the Volksbibliotheken. In 1847 a few professors of the Berlin University formed what we may call a university-extension society for scientific lectures, with the secondary object of founding Volksbibliotheken. A small charge for admission to the lectures was made, and, the lecturers giving their services free, a considerable sum was acquired for the Volksbibliotheken, and in 1847 the society was able to offer 12,000 marks (\$3,000), which the city accepted, and in 1850 the amount was increased to 18,000 marks (\$4,500). On August 1, 1850, the first four Volksbibliotheken were opened. They were governed by commissioners selected from the society and the city councils; the city had to contribute \$750 yearly, and the society gave the proceeds of the lectures. Besides these annual contributions, the society gave an endowment of 30,000 marks (\$7,500), which produced \$300 a year. Altogether the society gave the city over \$25,000 up to the time of its dissolution in 1879. Although there are now 27 small Volksbibliotheken in Berlin, there is no central library, so that their usefulness is very greatly diminished, because either the 27 must all buy the same books, thereby necessitating wasteful and costly overlapping, or the readers of 26 are deprived of that particular book in the library where it has been purchased.

"The 27 libraries together contain 104,356 volumes, giving an average of less than 5,000 volumes to each, and this for a city of nearly 2,000,000 inhabitants, the capital of the Empire. The absurd hours of opening are the greatest inconvenience. It seems incredible, but it is none the less true, the majority of them are opened for only six hours weekly, and that at midday—Wednesday and Saturday from 12 to 2, and on Sunday, 11 to 1. That may, perhaps, have suited the times in 1850, but to-day such hours are totally inadequate. But can it be seriously thought that the lower classes can find time in the middle of the day, not only to go to the library but to take their place in the crowd always there and wait half an hour or more until those before them have received their books? It really says something that, in spite of this, the use made of the library is, according to statistics, very considerable. Happily these hours of opening are now being changed; 1896-97 Nos. 1, 16, 20, and 27 were opened during the evening instead of midday. * * * These four are open from 6 to 9 p. m., and how this tends to increase the usefulness of the library is shown by the last official report. No. 1 issued in 1895-96 only 11,528 volumes, but in 1898-99, 68,578 volumes."

Prussia contributes over 1,000,000 marks (\$250,000) annually to the university library and the royal library in Berlin, but only 50,000 marks (\$12,500) for the Volksbibliotheken throughout the State. Dr. Schultze thinks that no part of this money should go to the city libraries, as these are able to take care of themselves; but to the village libraries, whose existence depends upon outside support.

Dr. Schultze gives well-deserved praise to the Society for the Extension of Popular Education, which, since 1892, has devoted its entire attention to the founding of "ländliche Volksbibliotheken" (village libraries). From August, 1892, to the end of 1900, it established no less than 760, with 46,257 volumes, and gave to 348 others 10,724 volumes.

The advocates of the public library meet with the same unreasoning opposition and same lack of understanding as we have experienced in England. The necessity for such libraries is questioned, as if the popularity of the existing libraries did not show that the people were eager for the spread of libraries throughout the land. "Then the city fathers come with long faces and talk of the great demands upon their resources, but a fortnight afterwards the same city fathers are ready to vote hundreds of dollars toward entertaining any congress, great or small. That, however, is the recognized thing to do, and is reported in the newspapers, but the other works silently, yet would amply repay the costs."

The author says he has "purposely almost ignored the Stadtbibliotheken (city libraries), which so many towns possess, because the greater number do not at all represent the public library as understood in this country. Instead of trying to keep abreast of the times they have slavishly followed their original plan of buying only theology, history, and philology, thereby making them useless except to the learned, and as their means increased during this century they have gone on in an objectless way trying to rival the university libraries. * * * They are very little used, * * * most of the towns enormous sums, and would be decidedly better if converted into real public libraries."

Dr. Schultze meets present and future objections by saying that there is no reason why German public libraries should not be as successful as those of England and America, for although there are not so many men of enormous wealth in Germany as in America, yet they could surely do what had been done in England, as English public libraries were not so much indebted to private benefactors as to municipal enterprise. "For do we not follow England in many other things in which a few decades ago she seemed to be far ahead of us? Have we not outdistanced England in many branches of industry? Have we not so developed our commerce that England is seriously affected by it? Are we not trying to put our fleet on an equal footing with the English, as seems so desirable to friends of the navy? And then are we to resignedly take a position behind England in a matter which hitherto has always been regarded as the peculiar province of German culture—in the matter of education? Such resignation shows little spirit and little reason. * * * We must first of all have it clearly and thoroughly understood that we are here dealing with a duty imposed by civilization which, strange to say, has been grossly neglected by us for generations, and that we owe it to our national honor and national greatness to see that we promptly and fully atone for our neglect." It will indeed be strange if at the end of the nineteenth century such a plea as is contained in this book of nearly 400 pages can be put forth in the cause of education without producing effect. In any country it would be remarkable, but in Germany it would be incredible.

Although English librarians will feel highly pleased to read the nice things said of them and their libraries, they will not find Dr. Schultze chanting pæans to all their ways. In a brief mention of the debated "open access" question he says that the system commends itself to his favor, but that there is not much prospect of unanimity of opinion on this question, which is attacked and advocated by strong partisans, but the fact of opposition being made to the newer system is not to be taken into account in judging its merits, for "all English librarians are not so practical in all matters as we might have expected them to be. This is especially noticeable in the usual English practice of dividing English libraries into two parts, the lending and reference libraries. It might be thought that this division only went as far as keeping in the library all purely reference works, such as dictionaries, atlases, etc., and costly and sumptuous books, while all others might be issued for home reading. No; far from it. A very large part of the collection is taken and made into a reference library, and nearly the whole of the science books are put into this section. Why? Because it has always been done, and also, perhaps, because the British Museum does not issue its books for home reading, and in order to make it possible for readers who are making special studies to obtain the book at any time, as in the British Museum."

"It is at the same time forgotten that the British Museum serves only for special purposes, but that in a smaller town the specialists are very few, and for them there are generally science libraries, and that limiting the use of large collections of books to the reference library reduces its usefulness to a mere shadow. Many warning voices have been raised against the extension of the reference library, but I can not go further into this matter here, and only point to the folly we would be guilty of were we to unquestioningly copy not only the good and admirable quali-

ties of the English public library, but also the bad. Fortunately there seems no disposition to do this."

Our Sunday is as strange to the continental as a German Sunday is to the Scottish Presbyterian, and it is not surprising to hear that when public libraries are really established in Germany they will open on Sunday. Dr. Schultze puts the case for Sunday opening just as strongly as do all who advocate a rational Sunday, but even those who would open all public libraries on Sundays must notice that the British artisan does not crowd his fellow in the reading rooms on Sundays. However, conditions are different in Germany. The conscientious objector who regards Sunday opening as sinful (the difficulty of staff can be overcome by employing Jews, as in Birmingham) receives no mercy at Dr. Schultze's hands. "It is to be hoped that we shall remain free from such aberrations. Happily it is an understood thing that we shall have Sunday opening when the time comes."

This book will certainly interest German readers, and ought to be of interest to librarians, for the survey of public library work covers the world. The photographic illustrations might have been more numerous. In this edition they are limited to pictures of typical libraries. The prevailing opinion in Germany and England is that the Volksbibliothek and public library are identical. There is now no longer excuse for belief in this popular fallacy.

Dr. Schultze concludes finely by saying that to cool, calculating reason the establishment of public libraries now appears to be a pressing necessity, and this necessity is more and more recognized by every generous nature. "'And though I speak with the tongues of men and of angels, and have not charity, I am become as sounding brass or a tinkling cymbal.' Love for our fellow-men—surely that will help us to do what we acknowledge to be our duty. True, many difficulties are to be overcome, but if the right spirit is in us the tide of hope shall sweep away all barriers."

X. HIGHER EDUCATION OF WOMEN IN AUSTRIA.

[Little has been said hitherto concerning the higher education of women in Austria, but in reality strong efforts are being made there to lift the education of women to a higher plane, and it is the men who aid the cause in many ways, as will be seen from a brief summary which appeared in the *Deutsche Stimmen*, a magazine published in Cologne, Germany, and which is here reproduced in English.]

Since the entrance upon office of the minister of education, Dr. von Hartel, who in his former position as court librarian showed on different occasions that he was a friend and advocate of the education of women, an earnest effort has been manifested in Austria toward the reorganization of the entire system of female education. The former chief in the ministry of education, Baron von Gautsch, had already taken measures to regulate the higher education of women in general, and for the establishment and organization of secondary schools for girls in particular. For this purpose the present minister sent an experienced educator to Germany, with the commission to study the system of secondary schools in that country and report the result of his investigations to the minister of education. Reports on their organization, attendance, and the professions open to their graduates were likewise requested of the girls' high schools already existing in the different Crown lands of Austria, so that the minister had at hand abundant material in order to discuss the principles of a plan for reorganization of girls' high schools in a conference of professional men.

This conference took place in the ministry of education on May 14 and 15, 1900, and framed resolutions on the basis of which a speedy reform of female education might be undertaken. Before giving the results of this discussion, a few brief general remarks on the education of women in Austria may be made.

This country was comparatively late in affording girls the possibility of attending advanced educational institutions after leaving the common school upon completion of the obligatory course of study—that is, after the fourteenth year of age. As in cases of different character, private enterprise made use of the circumstance,

so that the State made no provision for further education of girls. Thus as early as 1839, by sanction of the imperial public school law which annexed a three-graded burgher school to the five-graded elementary or people's school in cities, a large number of private institutions were called into existence, which, under such names as female continuation schools, schools for girls, or girls' lyceums, aimed at giving young ladies instruction beyond that which is offered even in well-advanced elementary schools, especially in the study of foreign languages. In the year 1883 the conservative amendment to the school law of 1839 was passed, which contained the following paragraph relative to the secondary education of girls: "For girls who have attained an age beyond that of obligatory school attendance, courses of study may be instituted for the purpose of advanced education" (allgemeine Fortbildung). In 1885 a ministerial decree regulated the system of secondary education, formerly only subject to local legislation, from a pedagogic-didactic standpoint.

Among these newly founded institutions, the schools established by the Woman's Industrial Society of Vienna, in 1867, occupy a special place; they include a lyceum for girls, a business college for girls and women, a drawing school (a school of design, as it would properly be called), a dressmakers' school, a studio for decorative art, courses in foreign languages, in knitting, embroidery, hairdressing, etc. Since its foundation the society has instructed about 20,000 pupils and has done much to develop the idea of professional education of women.

A similar association was founded in Vienna, the Society for the Higher Education of Women, which established a classical high school for girls October 1, 1892. One year after, an institution of the same character was opened in Prague by the Minerva Society. Since its foundation the society in Vienna has accomplished a great deal and has opened many lines of occupation to women. Its final and chief aim is to open the Austrian universities to women, to gain for them the right of practicing medicine, and also to make the higher positions in the teaching profession accessible to them.

A great deal has been accomplished in this regard within the past few years. In 1897 women were permitted to take the university course of philosophy after they had been allowed to attend the lectures of private professors by invitation since 1878. The regular students of the optional course of philosophy are likewise admitted to the obligatory course, if they have attained the age of 18 and possess a diploma from any Austrian gymnasium (classical high school) or one admitted by the minister of education to be of equal rank. Until further action, the decree of the year 1896 holds good, allowing the young women of Austria to be matriculated for the course of medicine if they have studied ten semesters at a foreign university after passing the State examination. The study of medicine is therefore open to women, although the well-known physician, Professor Albert, in 1895 emphatically declared himself opposed to the admission of women to the profession. Recently, Prof. Edmund Bernatzek, of the Vienna bar, has, upon request, published an opinion¹ on the admission of women to the study of law. He advocates their admission as a consequence of the graduation examination allowed in the classical preparatory schools. He also requires, as a further consequence, that women be admitted to the practice of law, as the consent to study would otherwise not be complete, and useless. "Not all positions in the legal profession, it is true," he says, "are appropriate for women. Still, they can with propriety fill those in which they do not come in direct contact with the public." In pursuance of this opinion, the faculties of law at the universities of Prague and Vienna have admitted women to their lectures.

A wide field of action is open to the women of Austria in the profession of teach-

¹ The Admission of Women to the Study of Law, by Dr. Edmund Bernatzek, Vienna, 1900, published by the Society for Higher Education of Women.

ing in elementary and burgher schools, as women who have received their education at State or private normal schools are preferred for the lower grades of such schools as well as for kindergartens.

In addition to these institutions for higher female education, the Society for Academic Lectures for Women, the so-called Ladies' Academy, founded by private enterprise in 1895, but receiving State support, gives a scientific education to young women and girls of the upper classes adapted in text and outline to the future vocations of the students, and is, in a certain sense, a continuation of the girls' gymnasia, designed, as the then chief of the section of the ministry, Dr. von Hartel, announced at the opening of the academy, "to refute the opinion of serious-minded men, that women are not adapted and competent to accomplish any earnest scientific work."

The youngest higher institution for women, still in its earliest stage of development, is the Atheneum, a kind of woman's university for scientific lecture courses founded by voluntary action of the Austrian university lecturers, and designed, primarily, to consolidate the heretofore divided separate scientific efforts in behalf of women. The attendance of women teachers and educators, in particular, is anticipated and solicited, and their professional needs will receive consideration. Women and girls are instructed in all the sciences, without, however, the prospect of receiving a diploma or any certificate testifying to their ability in any branch. No attention is paid to business education; the effort of women to advance in learning alone is considered. Lectures are delivered on chemistry, the hygiene of food, hygiene of female life, the history of civilization, political economy, and French, German, and English literature. If the attendance proves sufficiently large, the courses may be extended and supplemented. The Atheneum began its work October 1, 1900. Among the lecturers are professors to whom Vienna owes the introduction of the popular lecture courses, the so-called university extension.

The official inquiry referred to in the beginning of this article was to determine, in the first place, whether a reorganization in the sense of uniformity were desirable; whether the existing type of six-graded lyceums were to serve as a model and what studies were to form the curriculum; and, finally, to decide whether it be wise to admit all teachers to the full course of study.

In the discussion the fact was not ignored that female education by no means meets the demands of the times, which present new conditions of the social and economic life of women entirely different from those of former epochs, and for which the schools of the present period sufficed. Neither was it forgotten that women have been admitted to professions which require an academic education and were, until recently, open to men only, and that a strong movement has been manifested which demands for the broader sections of society something beyond the obligatory common-school education from which a professional and industrial education must result. The inquiry furthermore considered the differences existing in the various girls' schools of Austria, numbering 47 at the time, with regard to their organization, and concluded that a reorganization of female education was necessary to the end that the more numerous peopled strata of society be provided for before measures can be taken for the establishment of State institutions for the well-to-do classes. These latter are in a position to acquire an advanced education by private means without making a claim for assistance from the State.

Concerning the results of the inquiry, most of those actively interested advocated a reorganization of the six-grade girls' lyceum, which may be attended till the seventeenth year of age, after completion of the studies of the five-grade people's school. For this lyceum a uniform curriculum was advised, the foundation of which was to be, as before, the humanistic branches, language forming the central study. Foreign language study, as well as the natural sciences applied as closely as possible to practical demands of life, should have a sufficient number of

hours assigned. A conspicuous fact is that religious instruction is likewise designed for these institutions. Different privileges, among them admission to university courses, are to be granted to graduates of such normal lyceums. It was advocated to employ women teachers who have graduated from these lyceums and have attended lectures at the university, but before such a reform can be carried out, a teacher's diploma issued after an examination for positions in girls' lyceums must be insisted upon, lest these schools be injured from the start by inferior teachers.

The establishment of State gymnasia (classical schools) for girls does not come within the scope of the plan of the minister; still, girls who have privately acquired a classical preparation are, upon passing the required examination, granted certain rights that were proposed for discussion. The main purpose of female secondary schools, according to the resolutions of the conference, is to give a certain degree of thorough general education especially adapted to women; consequently, no superficial smattering of many studies, but a solid knowledge and ability in the important branches of female education. Elementary female education, particularly in burgher schools, was also discussed during the conference, as well as industrial technical schools for the poorer people. These schools for a long time have been a social problem of vital importance to general social order. The struggle of women and girls to extend their field of labor has become a serious social necessity.

The less conspicuous efforts to meet the pressing needs of extensive social circles by education above that which is offered in obligatory elementary schools also received attention. In that regard a recently published article has stirred the authorities to action. It is entitled *Technical Education for Women and its Organization with Reference to the Practical Demands of Life*, written by the ministerial councilor and well-known organizer of industrial and commercial schools in Austria, Dr. Franz R. von Haymerle. In his opening address Minister von Hartel referred emphatically to this article. The trend of thought in his remarks was the same as that followed by Haymerle in his excellent treatise.

The well-informed author undertakes to point out partly new ways of female education, and in giving the character, outline, and arrangement of instruction, based upon thoroughly practical grounds, he shows ways and means to increase the labor power of women. In the beginning of his article he distinctly states that he has expressed only his private views, nevertheless they may be accepted without fear of contradiction as those now dominant in Austrian educational circles. He advocates the establishment of cooking schools and training schools for factory hands, orphan-asylum and domestic-service schools (Austria numbers a half million house servants, Vienna alone 86,000), and courses in bookkeeping; consequently, the establishment of institutions designed for the education of the wage-earning classes, in the narrower sense of the term, besides schools for technical education in special branches, as, for instance, the training of nurses for infants and nurses for the sick, also special preparatory courses for business positions, office work, agricultural pursuits, as well as for various arts and industries.

According to Haymerle's plan, a second group of institutions, schools for domestic economy, housekeeping high schools, and courses on sanitation are designed to teach housekeeping and its refining technical side. Another group includes technical continuation schools for girls, especially apprentices. To the last group belong all preparatory institutions intended as a foundation for higher courses and studies. To crown the whole structure, Haymerle proposes the establishment of a female technical labor museum, and a central place for the encouragement of the arts, in which all ramifications of the organization shall find a common focus.

It is in a high degree significant that the author of this study considers the development of female education from its beginning on, keeping woman's inde-

pendent ability to earn a livelihood in the foreground, and not ignoring the application of female power to manual, industrial, and administrative purposes. In the year 1890 there were in Austria a round half million more women than men; and of nine millions over 10 years of age, almost five were self-supporting; of these about three millions were unmarried. These must be provided for first, not the upper ten thousand, "who may seek their educational benefit in æsthetic and philosophic studies, and in following the beaten paths in which the alternations of life depend upon a more or less successful penetration into the secrets of Latin and Greek grammar, or may do homage to more practical aims." In our estimation, also, the main point of issue in the modern woman movement in Austria is to apply the efforts toward advanced education to the benefit of the middle and lower classes especially, whose professional and technical education must be provided for by the State. To quote Haymerle again: "Only the authority of the State and the established confidence in its actions can make an educational institution popular in the broader sense of the term." For the current year (1900) 8,220,000 crowns (about \$2,110,000) have been appropriated for industrial and commercial education; only 153,000 crowns (about \$39,000) of this amount, however, is to be expended on female schools. These conditions can not continue; changed social and economic relations must be taken into account. Female education must be recognized, so that women and girls who are not provided for may acquire the means to earn their own livelihood.

The question of support has become so prominent that it forms the basis of all other reflections. During the women's congress in Munich, October, 1899, Professor Haushofer spoke on "Woman in business," concluding his address with the words that—

If women want to improve their position they must not fail to observe three things incessantly: First, a uniform movement must be supported by all the women of Germany; that which has been attained can not be given up, the as yet unattained must be striven for with the evidence of its being necessary and deserved. Second, women must take the peculiarly feminine virtues into public life—patience, punctuality, carefulness, and æsthetic taste in all they do. Finally, women must learn of men the ability to organize and administrate, to separate personality from objects in view, and to discipline self.

We believe that the women of Austria in their struggle for opportunities of education and labor should not ignore the admonition of one who has so thorough a knowledge of our economic conditions.

XI. AGRICULTURAL SCHOOLS IN AUSTRIA.

Contents: General review. I. Higher agricultural and forestry schools: (a) University of Vienna; (b) University of Krakow; (c) Technological University of Vienna. II. Secondary agricultural schools: (a) Agricultural colleges; (b) forestry colleges; (c) wine, fruit, and gardeners' schools; (d) brewers' school. III. Lower agricultural schools: (a) day schools; (b) winter schools; (c) forestry schools; (d) dairy schools; (e) schools for special branches, such as fruit, wine, flax, and hops; (f) schools for brewers and distillers. Statistical data.

[NOTE.—For the exposition in Paris, the Austrian Government prepared a number of monographs descriptive of various characteristic features of the Austrian educational system. Among them was one giving an account of the efforts in behalf of agriculture and forestry, which was prepared by Friedrich Ritter von Zimmerauer, chief of the educational section of the department of agriculture in Austria. It appeared simultaneously in German and in French.

This pamphlet is of unusual interest, inasmuch as it shows not only what is done for agriculture in Austria, but how it is done. It is inserted here in English owing to its lucid classification and the numerous hints it offers for similar schools in other countries. The author evidently has the educational side of the question

of agriculture near at heart, and he states the facts in simple, unequivocal style. His comprehensive statistical tables are here omitted, as being of no immediate use to the American readers; only summaries are offered.]

GENERAL REVIEW.

The manifold forms of agricultural and forestry education in detail in Austria,¹ may be classified in a system with three main groups of schools: A. Higher institutions, of university rank; B. Secondary schools; C. Lower schools. The basis for this division is found in the higher or lower curriculum designed for the different schools.

The course of study determines for what occupation within the broad field of agriculture—eventually for what particular specialty—the separate institutions prepare their students. As manifold as their purposes may be, they are nevertheless, at least approximately, referable to one of the following three fundamental ideas: (1) The course of instruction takes pupils so far as to prepare them to manage independently a small estate (a farm, for instance), which means a business in which the proprietor and manager, as a rule, does part of the work himself. (2) The course may give an advanced education required for agricultural and forestry pursuits in which the manager gives no assistance by manual cooperation, but only distributes or directs labor. (3) Or, finally, the course insures the highest scientific education in agriculture and forestry preparatory for practical work or technical teaching and original investigation.

Upon this difference in the aim of the studies, with which, as a matter of course, various demands with reference to preparatory courses go hand in hand—as any technical education presupposes a certain degree of general education—rests the above-mentioned fundamental division into the three categories of lower, secondary, and higher schools.

To this first and most important classification, however, a second is added with regard to agricultural schools. According as all agricultural studies are taught to an equal extent and adapted to the purpose of the institution, or only special branches (for instance, fruit culture, vine raising, dairy farming, housekeeping, etc.), these schools are divided into (1) general agricultural or agricultural technical schools, and (2) special agricultural schools.

Considered from the two points of view mentioned, there exists in Austria to-day (1900) the following kinds of independent agricultural and forestry schools:

A. Those of the lower grade, distinguished as general technical schools (including all general studies pertaining thereto)—farming and agricultural winter schools, sylvicultural schools and training schools for foresters; also special schools for the study of horticulture, fruit culture, vine raising, dairy farming, housekeeping, brewing, and distilling.

B. Those of the secondary grade, distinguished as general technical schools, the so-called agricultural institutes or colleges, and the secondary agricultural and forestry schools, an œnological and pomological institute, a secondary school for fruit culture and horticulture, and a secondary special school for brewers.

C. Higher schools or universities—only one institution in Vienna—with three departments, namely, for agriculture, forestry, and the technique of agriculture. Also, an agricultural lecture course at the University of Krakow.

As a rule, the completion of the course offered in elementary or people's schools is the condition of admission to the schools of the lower grade (A).

For schools of the secondary grade (B), as a rule, the completion of the studies of the lower grade of general secondary schools (so-called high schools of six

¹ In this article Austria is understood to mean Austria proper, officially called Cisleithania, which does not include Hungary.

years' course), or at least graduation from a burgher school (advanced elementary school with some secondary studies) is required.

The highest grade of agricultural and forestry education offered in institutions of university rank (C) presupposes the passing of the graduation examination of either classical or modern high schools of nine years' course, which admits anyone who holds this certificate of graduation to universities or polytechnical schools.

The three chief categories of independent technical schools mentioned by no means exhaust all the opportunities offered for an agricultural education in Austria. To the foregoing should be added the instruction in agriculture and forestry given in all polytechnical institutes under the form of lectures by private and regular professors; furthermore, the obligatory courses in agriculture in normal schools, and, finally, the so-called agricultural continuation courses designed for the more numerous classes of society, and forming part of the curriculum of people's (or public) elementary schools.

All these manifold forms of agricultural education are still further supplemented by the extensive system of ambulatory lectures, the freest form of professional instruction, which is, literally speaking, brought to the door of the rural people; also, by the frequent courses in agriculture and allied sciences in schools not directly designed to aid agriculture, which courses are outside the scope of the present article, and will receive no further mention.

An important principle often overlooked is that each one of the three categories of schools mentioned gives a technical education in itself separate and complete, and that consequently the lower grade of schools is not simply a preparatory institution for the higher. This idea is contradicted by the fact that a definite course of study without any reference to a higher course is arranged for each category and requires a certain degree of general preparatory education.

With these remarks, necessary for the correct understanding of the system of agricultural and forestry schools, we shall proceed to give a short sketch of the most important features in the organization of each of the three categories mentioned. We shall begin with the highest grade—the university.

I. HIGHER AGRICULTURAL AND FORESTRY INSTITUTIONS.

The following institutions in Austria are devoted to the highest agricultural and forestry study: The Agricultural University of Vienna, established by the department of agriculture and opened in 1872; the faculty of agriculture at the University of Krakow, established in 1890; the lecture courses in agriculture at the technological universities in Vienna, Graz, Prague (both in the German and the Bohemian), Brünn, and Lemberg; and, lastly, the two courses of agricultural technique in the institutions at Prague.

1. THE AGRICULTURAL UNIVERSITY AT VIENNA.

For the establishment and support of this institution (which is not to be confounded with the ancient university of that city) the law of April 3, 1882, appropriated all expenses. It is designed (according to its charter, dated June 6, 1872) to give "the highest possible scientific education in agriculture and forestry."

Founded by the department of agriculture, the institution was transferred in the beginning of the year 1878 to the department of education. Still the former department has preserved a voice in the management of the institution, such as questions of organization and the nomination and appointment of professors.

The didactic direction of the university is confided to a faculty of professors who are responsible for the fulfillment of the purpose of the institution. The rector is at the head, and is elected by the faculty for a term of one year from among the regular or ordinary professors. The department of education has the right of confirming or rejecting the election.

The teaching personnel consists of 17 ordinary and 3 extraordinary professors; 21 private docents; 3 teachers and 12 assistants. Since the school year 1883-84 three courses of study are pursued: (1) For farmers; (2) for foresters, and (3) for agricultural technologists.

For the matriculation of regular students a certificate of graduation from a classical or realistic high school of nine years' course is required. Regular students of a technological university (polytechnicum) are admitted if they hold the same certificate. Students may be admitted as mere hearers or extraordinary students if they do not hold the graduation certificate but possess sufficient preparation and have passed their eighteenth year of age.

Liberty of choice is allowed, both in regard to studies and direction; nevertheless, a plan of studies arranged by the professors for each of the three courses for a term of three years is outlined to be a guide for students. The following condensed remarks refer to the system of examination in vogue:

Regular students have the right to be examined in their special studies at the close of each semester by the respective lecturers and receive certificates of progress. The examinations are intended to prove the diligence and knowledge of students with respect to certain leading courses or branches. To attest the result of the entire course of study, public state examinations are held; three for the students of the agricultural and forestry department, and two for those of the course in agricultural technique.

The first (general) state examination includes the fundamental branches of all three courses of study. The subjects of the technical branches of agriculture and forestry are divided into two examinations—the one including production, the other agricultural industry or management. The course of technique comes within the scope of a single examination, aside from the general examination, which is common to all courses. In point of succession, after the general or first State examination the examination on production forms the second and that of agricultural industry the third State examination. Students of agriculture and forestry are required to pass the first State examination at the close of the second or during the third semester; the second at the close of the fourth or during the fifth semester, and the third at the close of the sixth semester or later. The students of agriculture technique are admitted to the first examination at the end of the third or during the fourth, and the second at the end of the sixth semester.

To conduct the State examinations the minister of education appoints special committees, composed partly of professors and lecturers at the university, partly of men not connected with it. The minister of agriculture, as well as the minister of education, may delegate special government commissioners to the State examination.

Other purely scientific examinations, the examinations for diplomas,¹ introduced in 1875, are designed to prove the highest scientific ability for the profession of agriculture and forestry. Only regular students who have completed at least the chief studies of the three years' course are eligible for diploma. The attendance at lectures as regular students at a technological university, or of those on philosophy at a university is accepted; however, attendance at the university in question for three semesters at least is required.

The diploma examinations for the two branches mentioned are divided into two groups, the first of which includes the preparatory sciences and law. The first group is open to candidates after their third semester of the university course, if they have followed the plan of study recommended. The second group is open to such candidates as have completed at least the chief branches of the respective technical studies as regular students of the university. Oral examinations are conducted publicly, written examinations privately and under surveillance.

The committee on diploma examinations is composed of the regular and extraordinary professors and lecturers of the studies forming the subjects of examination. All candidates who pass receive a diploma stating their ability in agriculture and forestry in the terms "competent" or "highly competent." The State teachers' examinations in agriculture and forestry held at the university form no specific function of the institution.

For a number of years special courses on practical agriculture and forestry have been held at the university. The latest results of investigation by practical men are given in lectures and demonstrations. These courses are usually delivered

¹ Academic degrees are not granted at the agricultural university.—Tr.

toward the close of the winter semester and include an extensive series of lectures and demonstrations on the most varied branches of agriculture and forestry.

2. THE AGRICULTURAL COURSE AT THE UNIVERSITY OF KRAKOW.

This course was established in 1890. It is the second higher agricultural institution in Austria and the only one connected with any of the old universities. Together with all its accessories, collections, laboratories, and other helps it forms an integral part of the department of philosophy. Being, therefore, a State institution, it is subject in its entire organization to the law governing universities and departments of philosophy in particular. Consequently only those are admitted as regular students who have passed the graduation examination of a gymnasium and hold a certificate of admission to universities. Other applicants, particularly graduates from a realistic high school, even though they hold certificates of admission to a technological university, are only accepted as extraordinary students, so-called hearers. In accord with the academic council (or senate) of the university, the minister of education decreed in 1891 that students who are graduates of a realistic high school may, upon request of the professors, be admitted to the promotion and graduation examinations if they attend all the lecture courses of the regular study plan.

By statute of the university the course on agriculture must "afford future agriculturists the opportunity of acquiring a thorough general and specific education, and enable students of other courses to gain a practical knowledge of agriculture of use to them in their vocations." The complete course requires three years. A definite plan of study is outlined, which must be followed for intended graduation. Polish is the language of instruction.

At the end of the first and second years promotion examinations, and after the third year a final examination, are held. Students who pass the last mentioned are graduated. Regular students who have taken a four years' university course can, in conformity with the rules, receive the degree of doctor of philosophy. The dissertation submitted for that purpose may have an agricultural subject.

A permanent committee, composed of specially appointed professors of agriculture and three professors of natural science, manage all matters pertaining to this department. Chairman of this committee is the regular professor appointed by the minister of education, and serving for three years as director of the agricultural course. The corps of teachers consists of five professors, two substitute teachers, and several assistants and demonstrators, besides a large number of professors of the philosophy faculty, a few of the law faculty, one veterinary surgeon, and two teachers from other schools in Krakow.

The agricultural course at the university of Krakow was opened in October, 1890; the following year the second year's course was added, and the third in 1892. The appointment of teachers and the fitting out of collections went parallel with this successive extension. In 1893 the first graduates left the institution, and since then it has become more and more solid within the compass of the organization sketched in the foregoing, and is at present an important factor in the system of technological instruction in Austria.

3. HIGHER AGRICULTURAL COURSES IN OTHER INSTITUTIONS.

Besides the university of agriculture in Vienna and the agricultural department of the university of Krakow, the various technological universities (polytechnica) give a higher course of instruction in agriculture. It is especially worthy of note that the German and the Bohemian technological universities at Prague have courses on the technology of agriculture in which the important branch of technique receives very much attention.

The studies of agriculture and forestry are naturally only secondary at techno-

logical universities. Nevertheless they form a very valuable addition to allied subject-matter in purely technological branches, and afford students of the last mentioned a welcome opportunity to acquaint themselves with the essential principles of agriculture.

As a matter of course the instruction given is essentially encyclopedic. Usually there is but one teacher, who, however, is greatly assisted by the lectures held on the comprehensive studies that form the course at technological universities, especially the natural sciences, agricultural chemistry, the studies of mechanics and machine constructions, and the technique of agriculture.

Lectures on agriculture are held every year at all technological universities—that is to say, in Vienna in two departments, in Gratz, in Prague in two institutions (the German and the Bohemian), and at the institutions in Brünn and Lemberg. In Vienna and Brünn the lecture courses are conducted by regular professors, in Prague by extraordinary professors, and in Gratz and Lemberg by private lecturers.

Forestry is included in the lectures on agriculture at the technological university in Vienna. At the two institutions in Prague and at that in Lemberg it forms the subject of separate lectures. In Gratz it is omitted altogether, and in Brünn special lectures on the damming of rivers closely connected with forestry are held.

II. AGRICULTURAL AND FORESTRY SCHOOL OF SECONDARY ORDER.

1. SECONDARY AGRICULTURAL INSTITUTIONS AND MIDDLE SCHOOLS.

In considering the agricultural and forestry schools of the secondary category—that is, the schools which hold a rank between the universities requiring a complete academic education, heretofore discussed, and the lower schools founded on the elementary schools—we shall first speak of agricultural schools exclusive of forestry schools.

Among these the schools at Teschen-Liebwerd and at Tabor, in Bohemia, and at Dublany, in Galicia, entitled “secondary agricultural institutions,” rank first and hold a somewhat exceptional position. The two schools in Bohemia require for admission graduation from an advanced agricultural school or the completion of six grades of a classical or a realistic high school. The institution in Dublany requires, as a rule, the completion of studies at a classical or a realistic high school, although a less complete preparation, though not below the completed sixth grade of a high school, may admit applicants if they pass a severe matriculation examination. These three institutions have a three years’ course each.

Excepting these three institutions, whose exceptional position depends upon particular historical developments, the organization of all other agricultural secondary schools in Austria is alike in essential features. They are at Mödling in Nether-Austria; Chrudim, Kaaden, and Raudnitz-Hracholusk in Bohemia; Neutitschein and Prerau in Moravia; Oberhermsdorf in Silesia; Czernichow in Galicia, and Czernowitz in Bukowina. Applicants who have finished the six years’ course of any high school are admitted. The schools in Bohemia and Moravia admit also graduates of a burgher school.

All agricultural secondary schools have a three years’ course, during which agriculture is thoroughly taught, besides the natural sciences and the general studies (language, history, geography) connected with the required preparatory education. The examinations are, as a rule, so arranged that pupils receive a certificate at the close of each semester and one at the end of each year. All students who complete the three years’ course may take a final examination for graduation, for which they receive a diploma. Students leaving before the close of any school year receive a certificate of attendance.

The most important, the final or graduation examination, is both written and

oral. The latter includes the following studies: Anatomy of plants; stock raising, based on physiology of animals; the study of agricultural implements and machines; the system of melioration; agricultural chemical technology; industry, and taxation. The purpose of this examination is not only to learn what the students have gained in each branch, but also, and particularly, how their knowledge is correlated, so as to facilitate the utilization of one science by the aid received in another.

The corps of teachers consists of a director, who represents the institution and is responsible for its management, and the required number of regular teachers or professors, besides substitutes and assistants for inferior studies. All the higher and secondary agricultural schools are State institutions, with the single exception of the "Francisco-Josephinum," at Mödling, which is supported by an association.

The graduates of all these institutions, like the graduates of other high schools, enjoy the privilege of only one year's military service. To the three institutions mentioned first (see p. 93) the further privilege is granted that even students of the senior year may enjoy the same favor before they have graduated, provided they make application during that year.

2. SECONDARY FORESTRY SCHOOLS.

The secondary forestry schools correspond to the agricultural schools of the second category just discussed. There are three of them, located in Weisswasser, Bohemia; Weisskirchen, Moravia; and Lemberg, Galicia. The first two are association institutions; the last mentioned is a State institution. There may also be mentioned a similar school in course of construction in Bruck, on the Mur River, in Styria.

All these schools follow the same course of study. The statutes of the school in Weisskirchen define that "students shall be educated by thorough courses in forestry and correlative sciences, so as to be able to pass the State examinations required for the practice of forestry." The two years' course formerly adopted in these schools proving altogether insufficient, a third year was added to the course, which enables the faculty to give more thorough instruction and in systematic order, especially in the natural sciences and mathematics, and, above all, in forestry and its relations. The humanistic branches are taught to a limited extent in the most important general disciplinary studies, religion, language, history, etc.

The condition of admission is the completion of the studies of the lower grades of a classical or a realistic high school and one year's actual practice in forestry. So much objection has recently been made to the value of this practice, owing to the youth of the students, that it is no longer strictly required.

The corps of teachers is composed of a director, the requisite number of specialist professors and lecturers, and several assistant teachers. As regards examinations, it need only be remarked that they are held at the close of every semester, and at the close of the third year upon completion of the course, when those who pass receive a diploma. With reference to the one-year military service, graduates of these secondary forestry schools enjoy the same privileges as those of secondary agricultural schools.

3. SECONDARY SPECIAL SCHOOLS FOR WINE RAISING, FRUIT CULTURE, AND HORTICULTURE.

The Oenological and Pomological School at Klosterneuburg, near Vienna, holds a special rank among the technical special schools of the secondary category. It is the only State school of agriculture, and as such is under the jurisdiction of the department of agriculture. The aim of this institution is to add to the education received in the lower half of any general secondary school technical instruction in wine raising, wine making, wine treating, and in fruit culture the profitable

utilization of fruit, so that students are prepared for positions as managers of vineyards, cellarers, teachers of lower special schools, and ambulatory teachers of the courses on wine raising and fruit growing, or as directors of schools for wine raising and arboriculture. Furthermore, that owners of large vineyards and orchards, as well as wine merchants, may be enabled to conduct their business intelligently. Besides these special branches, agriculture, mathematics, law, and political economy are taught.

The purpose of the studies taught is attained by a two years' course of theoretical instruction, corresponding demonstrations, and practical exercises in vineyards, orchards, and cellars, and by appropriate excursions. The students are either regular or transient students. The condition for admission of regular students is the satisfactory completion of the course of study of a general secondary school and a certificate of some practical experience in wine and fruit raising. Applicants who are prepared to leave the lower grades of a high school of six years' course may, upon consent of the minister of agriculture, be admitted after passing an entrance examination, to which special rules apply. Transient pupils form an exception, and special regulations apply to their admission. For the first year's course the number of students is limited to 25.

Independent of tests during the semester, examinations are held at the close of each semester and upon completion of the course of study. The subjects of the final examination are limited to the oenological and pomological branches and agriculture and their correlated sciences. Those who pass receive a diploma. The corps of teachers consists of a director, three professors, two lecturers for agriculture, law, and political economy, one substitute, and several demonstrators for practical experiments. The director has full charge of the management, represents the institution, and is responsible to the department of agriculture for the position of the institution in didactic, disciplinary, and economic relations. All the teachers are State functionaries and are entitled to pensions. With regard to the one-year military service, the students enjoy the same privileges as those of agricultural secondary schools.

Important supplements to the curriculum are the annual special courses for practitioners on management of cellars, grafting, protection against the *Peronospora* and *Oidium* of the vines, and on fruit culture and the utilization of crops. The most important of these courses is the one on management of cellars, held every year for two weeks, usually during February. It embraces a complete series of lectures (48) and a number of demonstrations and excursions in the afternoons.

Besides the institution in Klosterneuburg, a second technical secondary school for horticulture and fruit culture has been in existence in Austria since 1875. It is the school for horticulture and fruit culture in Eisgrub, Moravia. It was originally a high school for horticulture only.

This institution was opened in 1895 through the initiative of the Horticultural Society of Vienna, with appropriations from the department of agriculture and the Diet of Moravia and the munificent support of the Prince von Lichtenstein, by whose generosity the school was built in the extensive gardens of the Prince at Eisgrub. The purpose of this special school is defined by its statutes "to give, on the basis of the preparation acquired in the lower divisions of a general secondary school, or by the completion of the studies of a burgher school, a practical scientific and artistic education in all branches of horticulture and fruit culture; to make the students competent for new applications of all kinds of gardening; an intelligent management of vegetable gardens; the direction and supervision of public and private gardens, of whatever kind, and an intelligent management of fruit culture on a small or large scale." The course requires three years. The condition of admission for ordinary students is the preparation mentioned in the statutes and at least one year's confirmed apprenticeship in a large horticultural

establishment. The number of students, for whom a boarding school exists, is limited to 20 a year. Transient students may be admitted according to the limit of accommodations.

Besides the natural sciences and the chief branches of the humanities (religion, language, history, geography), statistics, and the technical disciplinary studies, the curriculum includes special practical instruction, upon which great stress is laid and for which the extensive gardens of the prince afford a field for demonstrations and exercises hardly equaled in extent and variety.

The system of examinations and certificates is similar to that of Klosterneuburg. The institution is under the management of a board of curators, composed of delegates from the authorities that contribute to its support. The corps of teachers consists of the director, three chief teachers, and a number of substitutes and assistants. The favor of one year's military service is also accorded to this school.

4. SECONDARY SCHOOLS FOR BREWERS.

Another establishment of recent times within the domain of agricultural instruction is the academy for brewers, found in Vienna (Suburb Währing) in 1895 by the Austrian experiment station for brewing and malting. The aim of this institution is to educate technologists competent to fill positions as managers in the establishment of this industry. Besides instruction in the theoretical branches and a thorough understanding of the technical auxiliary studies, as construction, machines, electrotechnics, and the administrative and commercial studies, the school offers opportunity to attain the high degree of proficiency required for the management of any large brewery in the present state of high development of this industry.

The degree of education required for only one year's military service in Austria-Hungary—that is to say, as a rule, the completion of the course at a general high school—as a condition for admission, corresponds to the high aim stated above. Those holding no such certificate are required to pass an entrance examination. The course requires two years, of which the first is devoted principally to the natural sciences, mathematics, and mechanics, and the second to the technical branches and several auxiliaries, as economics, law, industrial hygiene, prevention of accidents, the keeping of draft animals, etc.

The academy for brewing is connected with the experiment station for brewing and malting in Vienna, and the Technological Industrial Museum, also in Vienna. The lectures and exercises of the first year are conducted in the latter. Those of the second year are held in the building of the academy and the experiment station, where a large lecture and drawing hall, a finely equipped chemical, a microscopical, and a biological laboratory, a great "culture station," also valuable collections of helps to study and a completely equipped school brewery and malt kiln, erected at great cost, are at the students' command.

The corps of teachers consists partly of lecturers appointed for the academy, partly of lecturers of the Technological Industrial Museum. Examinations on the practical and theoretical branches are held at the close of each year and certificates are given. Those who complete the second year's course receive a certificate of graduation. Those who have had a three years' practical experience, either before or after completing the course at the academy, are entitled to a "brewing masters' diploma."

III. ELEMENTARY AGRICULTURAL AND FORESTRY SCHOOLS.

1. FARMING SCHOOLS.

These farming schools are elementary agricultural schools with instruction all the year round. As different as the purposes of these institutions, designed prin-

cipally for the farming population, may be, there is one thing in which they are alike, to wit: The statutes define in the first place that pupils who have completed the studies of an elementary school shall receive a practical and theoretical education which will enable them to manage a small farm intelligently. Many of the regulations emphasize the fact that these schools are designed for the peasantry, young men from that class being admitted in preference to others. The further purpose of these institutions is to educate intendants, managers, fodder masters, cheese makers, and other auxiliaries in agricultural industry. Many of these schools limit the number of pupils from didactic reasons and because of the limited accommodations of the dormitories often connected with them. Twenty is the largest number of admissions for each year's course.

Farming schools strive to attain their purpose by theoretical instruction, not only in agriculture and natural science, but in the ordinary branches of general education, the main point of instruction in the latter branches being to confirm the knowledge acquired in people's schools. Practical instruction is likewise given in all work that a farmer should know how to do, such as cabinetmaking, wheelwright's work, basket braiding, etc. In by far the greater number of these schools the course of study requires two years. The exceptions are only two farming schools in Lower Austria (Edthof and Edelhof) with a course of one year and a half, and the five schools in Galicia with a three years' course.

A characteristic feature of elementary agricultural schools in Austria, presupposing the preparation of an elementary school, is the specialty of practical instruction, for which reason they are open all the year round, even during summer, the most important time for practical work. Therefore, a sufficiently large farm (a practice farm) is required by statute in connection with them, and forms an indispensable means for demonstrations and exercises. Many enjoy the advantage of possessing such an experiment station, others are obliged to rent a piece of ground.

The corps of teachers consists of regular teachers permanently appointed for farming schools, and of a requisite number of assistants. The number, usually two or three, is defined by statute; one of the teachers fills the position of director or principal of the school and the school farm connected with it. The regular teachers enjoy permanent positions and, being ranked as public functionaries, have a right to pensions when they retire.

The greater number of these schools are under the management of a board of curators composed of delegates selected by those who contribute to the support of the school. They supervise the instructions, administer all their financial affairs, and in case of vacancies in the faculty make new appointments, while the appointment of assistants and all the laborers is under the immediate control of the schools themselves. The highest administrative authority emanates from the State governments of the crown lands or provinces. As a rule, two kinds of certificates are issued: the so-called classification certificate, stating the results of examinations held during the year, and certificates of completion of the studies given as a result of final examinations.

2. AGRICULTURAL WINTER SCHOOLS.

The purpose of agricultural winter schools is to give pupils who have left elementary schools and desire to become farmers on a small scale a theoretical preparation, principally for the profession, with the least expenditure of money and time. As the name implies, these institutions are open only during the winter months. In the spring the pupils return home to begin practical field work.

There are three kinds of agricultural winter schools—those with a one year's course, those with an optional two years', and those with an obligatory two years'

course. The first class, open only one winter (five or six months), are gradually decreasing in number, as it is beginning to be understood that their purpose can be attained only by a two years' course. In those with an optional two years' course the instruction given during the first winter is reviewed, applied, and greatly extended during the second winter. In those with an obligatory two years' course the students are divided in such a way that the fundamental branches precede the technical, and the first course devoted to the first-mentioned branches forms no complete whole, but is simply a preparation for the second, the two forming a complete course.

The winter schools have increased to a remarkable extent in Austria during the last ten years. As the statistics show, fifty-seven, or more than one-third of the one hundred and fifty-nine agricultural schools in 1898-99, were winter schools. The favor which these schools enjoy in preference to schools open all the year round is attributable to the fact that attendance being required during the months from October to April only, pupils are able to return home in the spring and help their parents in outdoor work. The people attach great weight to this circumstance, though they realize the disadvantage of having no practical field exercises which would be of great value to the pupils combined with theoretical instruction.

Several winter schools are trying to remedy this evil by brief, practical, summer courses on certain branches of agriculture (for instance, fruit, fodder, and vegetable culture). It stands to reason that no exhaustive practical instruction can be given. The curriculum, in general, includes all the fundamental branches taught in farming schools limited by the shorter terms. The personnel of teachers, as a rule, consists of only one permanent teacher, who is the director and teaches the technical branches and natural sciences, and of a small number of assistants or substitutes for the general studies. For each of the agricultural winter schools in Bohemia and Moravia two special teachers are appointed.

Although almost all these schools are supported by associations, the teachers enjoy the rank of government officials, and are pensioned like those of farming schools. Winter schools in alleconomic and administrative affairs are under the management of boards of curators composed similarly to those of farming schools and under the jurisdiction of the local government council. According to the statutes of organization, final examinations are held at the close of the course and certificates are given to those who pass them.

3. ELEMENTARY FORESTRY SCHOOLS.

As farming and agricultural winter schools form the lowest grade of agricultural, so the two kinds of elementary forestry schools, namely, "forestry training schools" and "silviculture schools," form the lowest grade of forestry instruction offered in Austria. The number of these schools is conspicuously small. While in the school year 1898-99 there were 97 farming and agricultural winter schools in all Austria, there were only seven forestry schools. It is not surprising, then, that an effort has recently been made to establish more of such institutions. Very lately, in 1899, two new silviculture schools were established in Bohemia, and both opened with favorable attendance.

The purpose of all forestry training schools, four in number at the close of 1899, is to educate foresters and assistants, especially for State forestry. On account of the extensive forests of Austria and the consequent need of foresters, these schools are State institutions and are subject to the board of directors of forests and domains, and in the last instance to the minister of agriculture.

Instruction is given during eleven months, beginning with October 1, and is during the winter, till the close of March, confined to the class room. During the summer practical exercises are conducted in the woods. The conditions of admission are relatively high, being the completion of the studies of a burgher school, or three

years of a high school, and at least one year's practical experience in forestry. The curriculum includes elementary instruction in the studies of arithmetic, geometry, surveying, mensuration, natural science, natural history, penmanship, drawing, and the technical branches of silviculture, preservation, use, and administration of forests, besides instruction in hunting and fishing, the study of game laws, outlines of construction, and first help in cases of accidents. The personnel of the schools is selected from the board of administrators of forests and domains, and always consist of a director and one or two assistants—forest assistants or advanced students. Pupils are obliged to pass public examinations at the close of the course, which are divided into those held in the woods and those held in the school-room.

The second type of elementary forestry schools in Austria includes the so-called silviculture schools, all of them institutions supported by associations. The one in Aggsbach, Lower Austria, and that in Pisek, Bohemia, are connected with farming schools, that of Weisskirchen, Moravia, is connected with a secondary forestry school.

These institutions are designed to educate foresters, assistant foresters, and guards. For admission the school in Pisek requires the completion of the studies of a burgher school, or four years' attendance at a high school of six grades; the other two require one year of preparation less, but all have the indispensable requirement of one year's practical service in forestry.

The course of study at the school in Pisek, which has by far the largest attendance, is the most extended and requires two years; the other two have only one grade. All three institutions teach the studies of a general education, particularly language, the fundamental branches of the mathematics and the natural sciences, besides technical subjects with correlative and auxiliary branches, as construction, hunting, fishing, and game laws. In Pisek the encyclopedic study of agriculture is added to this curriculum. All three institutions attach great importance to practical instruction in the woods.

In Aggsbach the teaching personnel consists of two specially appointed teachers, one of whom acts as principal. In Weisskirchen the teachers are selected from those of the higher institution, and in Pisek partly from those of the farming school. Semiannual examinations are held at all these schools, and a certificate for completion of studies is given if the final examination is passed.

4. DAIRY AND HOUSEKEEPING SCHOOLS.

While all the categories of schools that have been discussed are open only to boys and young men, dairy and housekeeping schools are designed either exclusively for girls and young women or they admit them. The purely housekeeping schools are meant exclusively for girls. Their purpose is to instruct young women in household duties and to create skill in the management of a country home. Instruction, therefore, includes management of stables and dairies, vegetable and fruit culture in home gardens, the utilization of fruit, and general housekeeping (superintendence of kitchens, including baking and laundry), female handiwork, hygiene, and care of the sick. Besides religion, language and arithmetic are taught. The latter branch includes the keeping of household accounts. Some schools also include the education of children. These schools are differently arranged in details, and it is beyond the scope of this article to enter upon these differences. It is almost needless to remark that these institutions are arranged as boarding schools, the pupils being as a rule arranged in groups, for special importance is attached to practical exercises in work. Three female teachers are in charge. The matron supervises and teaches the branches of housekeeping; the stewardess instructs in stable and dairy work, and the industrial teacher teaches female handiwork, arithmetic, and composition (letter writing). Besides these

three there are some assistants for other branches according to local demands. The course requires one year.

Housekeeping schools, according to experience so far, are very successful. Attendance has steadily increased. Where regular schools with dormitories do not exist, short courses on housekeeping are held for several months, mostly in elementary agricultural schools, especially in winter schools. In these courses the most important branches of the above-mentioned curriculum are taught within a more limited space of time.

In Friedland, Bohemia, there is, aside from a regular housekeeping school, an independent dairy school, governed by its own statutes and possessing steam appliances. It is designed exclusively for dairy instruction and several courses of lectures are given during the year, some for men and some for women.

5. ELEMENTARY SPECIAL SCHOOLS FOR HORTICULTURE, FRUIT, WINE, FLAX, AND HOP CULTURE.

Necessities felt in various branches of the agricultural industry have in the course of time led to the establishment of schools for special branches which can not receive sufficient attention in general agricultural schools. For this reason special schools for horticulture, wine, fruit, and hop culture have been established, with extensive buildings and experimental fields, designed to give their pupils, who, as a rule, have completed the elementary course of a people's school, theoretical and practical instruction, so that they may be able to practice their specialty intelligently later in life. Those for wine and fruit culture, chiefly State institutions, may be considered the most important of these special schools. The next in order are horticultural schools for the education of practical vegetable gardeners.

The institutions belonging to this category, included in the statistical notes following, are arranged very differently to satisfy local demands and the reasons for their foundation. They are partly State, partly association, partly community, and partly private institutions. The term of instruction varies between a winter course and one of three years. The studies in subject-matter and extent likewise show the greatest variations, but it is impossible to classify or group the schools as was done with others in the foregoing paragraphs.

6. ELEMENTARY SCHOOLS FOR BREWING AND DISTILLING.

Strictly speaking, these schools belong rather to technical industry than to the culture of the soil. In Austria they are represented by two schools for brewing and two for distilling. One of the schools for brewing is connected with the agricultural secondary school Francisco-Josephinum as a branch institute, and is managed by a board of directors under the control of the board of curators of the agricultural school with which it is affiliated. This school, with which a well-equipped school brewery for experiments is connected, is designed to give practical brewers theoretical instruction combined with laboratory exercises in chemistry and experiments in the school brewery. The elementary school branches are included in the curriculum. The school year is divided into two terms of equal length, technical instruction being confined to the second term. Applicants with an advanced preparatory education—for instance, that offered in the lower-grade general high school or in a secondary agricultural school, as well as those who are older and who have held independent positions in the business—are admitted at once to the second course. The conditions of admission to the first course are the completion of the studies of an elementary school and at least a half year's practical experience in a brewery.

The city of Prague possesses a similar school which belongs to two associations, the brewers' association in Prague and the industrial brewing association of Bohemia. The preparatory education required is the completion of the course of

studies of a burgher school, commercial school, or the lower half of a general high school. Those who can not comply with these conditions are admitted if they pass the entrance examination. The school year begins with the first of November and ends with the last of June and is not so strictly divided into two terms as that of the school in Mödling. Owing to the shorter term the course of studies is somewhat less extensive. Nevertheless the institution, which gives instruction in two languages, German and Bohemian, and admits pupils of both nationalities, has a very good annual attendance.

There are also two elementary schools for distilling, one in Prague, founded by the association for the alcohol industry in Bohemia. This school has an experiment plant. The other school is at Dublany, Galicia, and was founded by a committee of the higher agricultural institution of that crownland. Both schools are designed to prepare managers of distilleries, theoretically and practically, by a seven months' course of study. Those who have completed the course of a high school of six years, or that of an agricultural school, and practical men who can pass the entrance examination, are admitted. Great importance is attached to experimental lessons in both schools, that in Prague dividing its students into four groups, each assigned to different work. Frequent distribution of work enables the students to acquire a general and thorough knowledge of distilling in a short time.

STATISTICAL DATA.

To complete the foregoing condensed account of the system and organization of agricultural and forestry schools in Austria a few statistical data may follow:

At the close of the school year 1898-99 there were 159 agricultural and forestry schools in Austria. These include 2 institutions of university rank; 12 secondary agricultural schools and colleges; 3 secondary forestry schools; 2 secondary special schools for wine and fruit and horticulture; 1 secondary school for brewers; 40 farming schools, or elementary agricultural schools, open all the year; 57 agricultural winter schools; 7 elementary forestry schools; 13 dairy and housekeeping schools; 18 elementary special schools for fruit, wine, and hop, and horticulture; 2 schools for brewers; 2 schools for distillers.

According to the school census of 1898-99 these institutions were attended by 5,343 students.

According to the language of instruction, these 159 institutions were divided into 65 German, 62 Bohemian, 6 mixed German and Bohemian, 17 Polish, 3 Slavonian, 2 Italian, 1 Servo-Croatian, 1 German-Italian, 1 German-Ruthenian, and 1 German-Roumanian.

The detailed statistics are here omitted, but from what has been said it is seen that instruction in the important study of agriculture, the basis of the nation's prosperity, is comprehensive and regulated by a definite system. If, besides agricultural and forestry schools, we consider the other manifold institutions for instruction in agriculture not organized as separate schools, such as: (1) Instruction given in agriculture and forestry at many schools as a supplementary branch; (2) ambulatory lectures on agriculture; (3) the very large and constantly increasing number of special popular courses given by expert professors; (4) the instruction in agriculture offered in rural continuation schools (which is in need of extension and vigorous development) for people too old to attend elementary schools, and (5) other agencies for disseminating knowledge of agriculture, we may assert that in Austria—thanks to the active and unselfish cooperation of all factors concerned, State and provincial governments, special corporations, societies, and private citizens—those who intend to follow, or are following already, the profession of agriculture and forestry enjoy the advantage of perfecting themselves in the most varied manner and according to their necessities in all the special branches of their profession.

All existing institutions with this purpose in view are in a state of constant progress and development so as to be able ever to meet new demands and new necessities; this sketch is therefore not a representation of a complete development, but only of the present progressive state of affairs.

XII. NOIRÉ'S LOGOS THEORY.

[Prof. Ludwig Noiré, in his book on "Logos, Ursprung und Wesen der Begriffe," closes his interesting philosophic discussion with a chapter entitled "The Logos Theory." In this chapter he elucidates the theory of apperception in so instructive a manner that it seems proper to render it in English as a contribution to the discussion on psychology, especially on apperception, at present going on in the educational press of this country.]

I shall call my theory of the origin of language the logos theory. Two other names are appropriate for it also, to wit, "sympathy theory" and "causality theory," though not completely, because they do not include all the various parts of the whole organic analysis. The term logos theory puts the weight of the argument where it belongs, namely, in the origin of the idea and the combination of the various opposing elements which had to join and organically combine to generate and develop language and thought, the greatest wonder, the pride of creation. These contrasts or opposites may be plainly shown, in order to make the reader conscious of the many powers which had to combine to form the seed bud of linguistic life and to prove the absurdity and the nonsensical triviality of the so-called "imitation and interjection theory;" for these are explanations of the process of thought that can suit only such people as do not think. I will begin with a comparison of language and poetry.

Poetry is, even to-day, creating language, that is to say, ideas, and all original creating of language was poetry—high, ideal poetry. When in the midst of the chaotic, noisy, many-voiced concert of sounds of volition and emotion, for the first time on our earth a sound was heard that had a distinct comprehensible sense, an objective meaning, it was a moment of lofty poesy, for then the sixth day of creation dawned.

Let us, therefore, look into poetry as the living, ever-widening stream of the power of language for an explanation of the essence and characteristics of human thought in its perceptible, tangible appearance in language. Above all, let us see what ultimate contrasts are lying hidden in its depth, which in their combination and cooperation constitute its life.

Jean Paul¹ says of the drama that its most important task is the correct statement of motives. "But what else is this than to make inner necessity appear in the external succession of facts and scenes? This is possible in four ways: (1) Inner phenomena arise from outer, (2) outer from inner, (3) outer from outer, (4) inner from inner phenomena."

The drama is the core of all poetry, for in it speech and action, action and speech, are of equal importance; each pervades the other, both elucidate each other. What, then, Jean Paul says of the drama may be applied to all poetic expression. I shall proceed to present the four categories in their natural succession and explain them by examples. Action implies doing or working (*wirken*); but doing implies causality, the fundamental object of thinking, and hence the only means of portrayal in poetry. We may use the term "originate" (grow out of) instead of "*wirken*" (doing or performing).

1. In poetic expressions exterior things work upon other exterior things. This relation—that of cause and effect—is the fundamental category of all our compre-

¹ *Vorschule der Aesthetik*, II, p. 80.

hension of the perceptible world. Everything is traceable to it; everything must be expressed through it; without it no expression is possible. It therefore must be presupposed, as a matter of course, in all the following cases, since, evidently, all inner things can only be existent for language and thought after they are expressed, i. e., after appearing as perceptible words. Hence that which distinguishes the first category from the three following ones is the fact that in it only a purely mechanical process takes place, while the interior—the will—does not apparently come into consideration. It is the source of its appeal to sense-perception (*Anschaulichkeit*), the supreme merit of all poetry.

Horace says: "You see how Mount Soracte stands out covered with deep snow; how the moaning trees bend under their burden; how, arrested by the frost, rivers and brooks halt in their courses." All this is outer causality, outer change, very characteristic through the contrast to the former natural condition, when Mount Soracte appeared green, the trees stretched their limbs aloft, and the rivers and brooks incessantly hurried onward. An opposite case is found in a similar form of representation:

*Diffugere nives, redeunt iam gramina campis,
Arboribusque comae.*

And here are two more: "May is laughing, the woods are free of rime and icicles; snow is gone, at every green grove songs of joy are heard." "Freed of ice are streams and brooks through Spring's gentle reviving glance."

All these exhibit outer changes conceived as processes of causality, the more effective and expressive the stronger the contrasts that connect them. Nevertheless, one sees here, as everywhere in poetry, the inner life appear; in the "gentle reviving glance," "the laughing May," "the songs of joy," "the vanishing of snow."

Schiller describes the power of Charybdis in the following: "Ah, many a vessel, caught by the whirlpool, shot down into the abyss; and shattered keel and mast alone arise from the all-devouring grave."

Again, outer mechanical causality. Great and lofty verses often owe their beauty to the apparent want of relation between cause and effect, by creating an enormous effect from an insignificant outer cause, whereby the great power of the originator appears in a bright light. To this kind belongs also the famous line:

And God said, Let there be light: and there was light.

The simple word of command is the cause. Haydn has so interpreted this passage musically that, at the last word, an immeasurable fullness of tone, ever broader and broader sequent chords, signify the immensity of the effect in contrast to the simple command. The opposite was done by Handel in his admirable oratorio "Israel in Egypt:"

He commanded the sea—and it dried up.

Here the command is all-powerful, the effect "*pianissimo*," the sea obeys humbly. Both composers intended to express the same thing in opposite ways. Haydn describes the majesty of the Creator by the grandeur of the effect produced; Handel through a perceptible minimizing of the effect which, yet, is perceived to be immense.

To this kind of poetic expressions belongs also the passage from Homer in which Zeus by the mere frown of his dark eyebrows and a nod of his head makes great Olympus shake, a passage which three Roman poets have adopted:

Horace: "Cuncta supercilio moventis."

Virgil: "Annuit et totum nutu tremefecit Olympum."

Ovid: "Concussit terque quaterque
Cæsariem cum qua terras, mare, sidera movit."

Here, in order that the supernatural strength of the thunderer be made obvious, the mechanical effect (effect of outer things upon outer things) is presupposed,

although I do not mean to deny that as concerns the humbly obeying sea, ethical motives, that is, a mythological style of speech, may also be presupposed. In that case it is the living God who has created all and whose voice is heard by the trembling creature, which latter obeys unconditionally. If viewed in that sense the example may be classed in the third category.

How picturesque is the outer effect in the following by Uhland: "And the boatman kneeled oars at rest until he had softly said his Ave."

Can the peace of eventide be expressed more beautifully than by saying that upon the ever restless ocean the boatman may rest upon his oars and kneel to say a prayer?

2. The effect of the outer world upon the inner world is naturally very much more frequent in poetry, since it is one of the most effective means at the disposal of the poet in order to put reader or hearer into suitable mood. When in Schiller's *Diver*, after a twice-repeated summons of the king, in presence of the ladies of a resplendent court, "all remains silent as before," how can the awe-inspiring Charbydis be described more vividly than through this effect upon the mind? How ancient Homer delineates the beauty of Helen passing, by the one cry of rapture of the old men—the one pen stroke which surpasses all possible description—Lessing has shown us. Such lines as, "And a cry of horror is heard round about" in Schiller's *Diver*, instead of "The youth leaps down," "And all present turn pale," in *The Struggle with the Dragon*, as the master puts the stern, unexpected question, are means of poetic representation, equally eloquent and simple. This subject is so extensive that it can never be exhausted in this discussion.

3. The effect of the inner upon the outer world can happen only where sympathy is presupposed, and is therefore closely connected with the first category (which is decisive everywhere) as well as with the fourth. When at the sound of Amphion's lyre silently stone fits itself upon stone, or when it is said of Orpheus, "*Mulcentem tigres et agentem carmine quercus*," material and wild nature feels the charm of the song, otherwise these miracles could not happen.

When Virgil describes the wild uproar of an enraged populace which subsides suddenly at the appearance of a distinguished man we may consider this as one of the most beautiful examples of moral or spiritual effect, very well adapted to exemplify the appearance of a god who commands repose to raging storms and furious waves. Of similar sublimity is the passage in "*The Struggle with the Dragon*," where the commotion of the people who are storming and raging, a fully painted scene, is instantly quieted by the imposing personality:

"Then the master sternly knit his brow
And commanded silence."

The more imposing the outer appearance in which the process takes place, the more plainly is the inner process demonstrated. This third category may best be termed the rule of expression, the second the rule of impression.

4. The last category is that of the effect of the inner upon the inner world. While the first is the only material of poetry, which can exist only through illustration (*Veranschaulichung*), the fourth is the source of poetry, as indeed of all art. For in art soul speaks to soul, but it is able to do that only through the medium of sense perception, through outer representation. Speaking generally, all four categories are effective in poetry simultaneously. I have separated and distinguished them merely with reference to their greater or less effectiveness. Even the purely objective process of the first category must interest from another reason than the simple recognition, it must, at least, express a mood, a disposition, hence be spiritualized. The last category is the law of sympathy.

It needs no proof that all this, as a last contrast, rests upon the relation of subject to object. For the inner world (we may call it will, emotion, sentiment, idea, or what not) is always the essential part of the subject, the outer (the representa-

tion in time and space) the essential part of the object. Hence there are only two conceptions of the world possible, one given within, an ethical, and the other determined from without, a physical conception. To show how art steps in between and mediates is the task of æsthetics.

The whole presentation includes, as we see, the essence and effect of modern poetry. It starts with the presupposition which is the self-evident basis and law of all cognition, namely, that the outer world has an effect upon outer things, according to the law of causality. As has been shown, poetry always deals with inner motives, not exterior cognition; it ever dives down into the earlier sources from which cognition itself has arisen. But to us who are occupied with the origin, the coming into existence of cognition, the premise taken as self-evident, namely, the effect of object upon object, is the problem, the end to be sought. For we know that this apparently natural relation is the hard-earned fruit of human reason, for it is by no means simply a relation of natural objects, but in truth the "causal nexus" of ideas.

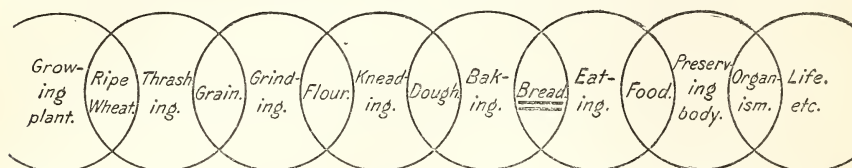
Much more original and natural are therefore the other links or categories in which the subjective essentially participates, as we see in animals whose intellect never passes out of the subjective sphere, but always perceives objects and causes effects directly. Our task, to aspire toward the highest character of human reason, objectivity, leads us to develop the relation between subject and object in inverse succession.

I shall now proceed to demonstrate how my theory of the origin of language embraces and connects this deepest contrast in its fourfold development. The theory starts from the last root of the effect of the inner upon the inner world, will upon will; that is, the ethical element. Above all it presupposes sympathy, and explains, first of all, our social relation. This sympathetic subjective common will becomes objective, it expresses itself in effects produced by common physical powers. Common will becomes objective by common activity and thereby becomes conscious of itself; hence it is the third category (effect of the inner world upon the outer), the many wills attuned alike, which are here represented. It is clear that not the will produced changes, but the physical being of man, his objective body, but that is in this case both will and consciousness. With the production of a lasting effect, the digging of a ditch, the braiding of the pliable willows, the second category comes into play also. The produced outer object becomes the cause of a common sense-perception, a common seeing, a common representation. How this develops into an intellectual action through causality which connects active will with passive perception (the law of expression and impression) I have stated elsewhere. Now, after these preliminary conditions the law of causality appears in its objective generality as a law of cause and effect between bodies in time and space, and with it the first category steps into the foreground. But, with this, thought arises, the idea is generated. Idea is, as we have seen, the combination of two conceptions (*Vorstellungen*) into a unity through necessity (causality). This combination could only occur where an objectively conceived process, the digging, for instance, joined another objective conception, namely, the ditch, to form a unity in thought through cooperative power of conception. That this can take place only in social relations by means of a perceptible equivalent, entirely independent of both ideas, i. e., the sound, the word, needs no new demonstration it is hoped.

What Logos is, how many contrasts it has to unite in order to be what the name implies, has been revealed to us plainly.¹ Independence, independent existence of ideas, which, though defined in the mind by sharply drawn boundary lines, yet are at the disposal of the mind, since they may at any time be called up

¹ The author presupposes a perusal of his previous chapters in which Logos is amply discussed. Translator.

through the word and the generic idea—that is the highest performance of Logos. Thus it originated; this ability to unite and distinguish is preserved in all its functions from the very beginning of thought to the present day, when the immeasurably involved operations of thought are performed with an instinctive, lightning-like swiftness and surety, so that it is well-nigh impossible to trace the separate threads. For the purpose of giving greater clearness to my meaning I shall by means of an illustration show how a single idea contains a number of



simpler elements of thought, also ideas, and how, through their cooperation and the assistance of others governed by them, may result a chain of thoughts which culminates in the one from which the others again radiate. I select the idea bread. Toward the left in our illustration the idea is developed genetically, toward the right teleologically. From left to right the idea becomes more and more special; that is, it absorbs more determining factors; radiating from the center in ever more general ideas, which, all because of their general character, may be brought into connection with it.

By such an illustration it is shown how for the human being ideas may play the rôle of real objects and how he gains the capacity to unite the most remote objects in his ideas, and thus to realize the great wonders of industry and commerce. Without the general ideas which give unity and independence to his separate concepts and make possible their rational combination, as well as their multiplicity, such processes would be impossible. This is the reason why an animal never goes beyond the concept of the present time, and why it can not escape from the limited sphere of its needs. Alas, contrary to this rule, the ants carry on to this day a regular systematized agriculture; they have their live stock and servants as we have. Yea, they have been detected in spending a whole quarter of an hour in gossiping. May God better it.

The idea of causality between objects! It is so simple, so plain, and withal so clear and convincing a distinction of Logos, i. e., human reason, as against all animal instinct, that it appears incomprehensible why this distinct and plain dividing line has not been observed and determined long ago. In order that this causality be comprehended by the mind, it is necessary that in the very beginning one of the two causal members be existent as idea, and that the other be produced through the process of thinking. In the expression "here somebody has been digging," the thing seen points to a past activity as cause. In the other expression "this is to be dug," it points to a future activity as an effect. Hence two ideas must be present in both cases, i. e., only one of them through representation; that, however, is possible only through the idea, the word: Therefore, only man, and never an animal, can be found in possession of a tool.

Kant has demonstrated, profoundly and convincingly, that certain original elements of thought must be added to give ideas reality, i. e., independence and subsistence. He has been roughly criticised by Schopenhauer, unjustly, I think; for the latter attributes to the animal likewise independent, objective ideas, which is a great error. On the other hand, Kant rated sense-perception too low, because he restricted himself too much to pure passivity, whereby he did not sufficiently consider that sense-perception is developed constantly through thinking, and especially in the direction which Schopenhauer justly terms intellectual intuition (*intellektuelle Anschauung*). This is, as has been seen, the most beautiful and ripest fruit of thought; and only man possesses it, whose capacity for sense-

perception is only awakened through language, and has developed through constant reciprocal activity side by side with language.

After thus arriving at a clearness which enables us to see that the life of ideas (*Vorstellungsleben*), both in form and essence, constitutes human thought, that its infinitely increased activity and capacity causes the immeasurable superiority of man over animals, and daily widens the unbridgeable chasm between them, it remains, in conclusion, to follow the subject to its last philosophic depth by investigating how the life of ideas (*Vorstellungsleben*) and the formation of thought are related to the fundamental faculties of man. For that volition, imagination, and thought are equally participating in the process, must have been brought to our attention at every step of our demonstration.

In the foregoing we analyzed perceptive activity alone, as it is met in poetry, into its last principle, according to which it enters into combination with thought, i. e., the principle of causality, and, in doing so, we defined four categories. Now, it remains to compare our division with that presented by Schopenhauer's fundamental work, in which he speaks of the fourfold root of the principle of sufficient cause. We shall find a marvelous agreement in them, and, in conclusion, I shall derive the terms fitting my theory of language.

Like Kant, Schopenhauer starts from abstract cognition as it appears in human judgment. In this he is right, and therefore causality is with him "*der Satz vom Grunde*," the principle of cause. For, as we know, all higher human cognition is realized in judgment, in assertion, in combination of subject and predicate; hence the first question we shall have to ask is after the—

(1) ¹ Cause of cognition, "*ratio sufficiens, ratio cur sit verum*." Why is any assertion, any judgment true? The sources of cognition may be whatever they are, every judgment has to pass muster in the forum of thought, and that asks for the foundation or cause of the assertion. The most important source of cognition, of course, is sense-perception furnished by everything material, but which goes back to outer changes and is therefore dependent upon the—

(2) Cause of coming into being, the law of cause and effect, be it that we judge from effect (upon eye, ear, touch) back to cause (that which is seen, heard, touched), or that we judge from the cause to the future effect, from the blow to the murder. This is causality in its purity, the fundamental law of all outer, empiric cognition. It consists, as stated before, only of phenomena in time and space and forms an endless chain in these two forms. But since this causality is applicable only to that which presents itself in time and space, it therefore deals exclusively with matter which itself is only an idea, an objective action, as it were. Schopenhauer deemed it necessary to separate from it the categories of transcendental forms, namely the uniformly extended time and space and to define them and their legitimacy by the—

(3) Cause of being in thought. This cause forms all mathematical judgment. Every Why? in mathematics is answered by the presumption of complete uniformity of all parts of time and space. That this is another Why? than that of coming into being, is beyond doubt, because the latter is always empiric, while mathematics consists of nothing but synthetic judgments "*a priori*." Nevertheless, the two classes are so inextricably interwoven that it does not occur to many why they should be separated, the more so, as, according to Kant's dictum, there can be in any branch of knowledge only as much true science as there is pure mathematics in it. It is therefore best to make it clear through examples, that whenever the question is one of pure mathematical quantity, a statement of time or space (i. e., a number) the Why? is of quite a different nature from the Why? of real relation of cause and effect. The originality, that is, the presupposition of

¹ I have taken the liberty of changing the succession of the four forms as they are presented in Schopenhauer's work. His real views are thereby placed in a clearer light and become better understood.

those statements of time and space necessary for the process of thought and the formation of empiric judgment, is seen from the fact, that a Why? can never explain to us how our thoughts are inseparable from these forms; nor will it ever be able to give us the least explanation of why our earth, our solar system, in short, every single phenomenon exists here in this particular part of space, and now in this particular time. Why did Goethe die in the year 1832? That is a question which has no sense, except a mathematical, because from two statements of time (the date of his birth and his age) the third is derived. Time determines time; space determines space; time and space determine each other reciprocally. That is the foundation of all mathematical, and lastly, of all human knowledge.

(4) The fourth division, finally, embraces the cause of action or the motives of it. While in the former three classes we dealt with intellect, here volition comes into play; here perception and idea are only means. As we said before, man is not only a knowing being, but foremost and above all a being of volition. Through ideas and cognition our will becomes conscious, illumined, our action is the result of motives. Hence Schopenhauer is right when he says: Motivation is causality viewed from within. What we call in plants stimulus (*Reiz*), in animals impulse (*Trieb*), is in man the idea (*Vorstellung*), namely motive or cause of action. But since his ideas are infinitely numerous and inextricably interwoven, just like the real objects they represent, his actions are very complicated, and hence circumspect and conscious of their purpose. However, that which really acts, is as immediate and simple as it is in plants and animals: it is the will.

But because the subject of the will is given immediately to self-consciousness, it can not be more minutely defined or described what will is; it is rather the most direct of all our cognitions whose uncommunicability must throw light upon all others which are not so direct.¹

To this last sentence I have not added a word to furnish the proof of the justness of our method which starts from that which is certain, the will and its expressions. Kant's and Schopenhauer's procedure is analytic, they penetrate from mere perception to the depth; Kant does it in transcendental presuppositions of ideas or categories. Schopenhauer by inquiring into the last root of the fundamental essence of man. Our method is deductive and genetic; we attempt to accomplish what Locke attempted: a genesis of reason. Hence, Schopenhauer's fourth class becomes the first.

(1) The law of motivation concerns the antithesis and unity of will and ideas. This law we have noticed before as the fundamental law of poetry and, we may add, of all art. Poetry and art appeal to man in his totality, the willing, feeling, and thinking man in the unity of his actions. Every action appears to us by means of ideas illumined by consciousness; hence connected by inner necessity, by motives. Who would deny the fact that the series of ideas connected with the will and standing in close relation to it must be the most natural, the most original of all? Furthermore, that practical thinking, so to speak—that is, thought directed by interest—based upon the foundation of the will, must be placed first? Is it not, even to-day, the object of life for most people? Liberation of thought from desires and volition constitutes progress toward theoretic knowledge. This proves that at first thought was intimately connected with the will; hence that ideas combined with others in the consciousness of original man, not in causal, genetic, and intellectual combination, but in form of instinctive impulses, accidentally or through natural causes. The will was autocratic ruler for a long period of time. All speech aimed at practical effects, at sympathetic agreement, impulsion to common action. From the first instinctive expressions of will, which may have been sounds of incitations uttered during aboriginal activities, such as

¹ Schopenhauer, *Vierfache Wurzel*, sec. 43.

digging, braiding, etc., up to the inflaming eloquence of the popular speaker who kindles the souls of men to enthusiastic warlike courage by pictures of desecrated graves and temples, of destroyed cities, of women and children dragged into slavery, there is active everywhere the same law—the effect of will upon will by means of sympathetic mood accompanied by related ideas. There is everywhere imitation, activity, will. Hence my theory has justly, I think, been called “Sympathy-theory,” because it builds its superstructure upon sympathy. From this we arrive by means of a narrow but firm bridge to our second (Schopenhauer’s first) class, namely:

(2) *The cause of coming into being.* This is the important fundamental rule of all outer and inner comprehension, and with it we approach the intellectual field. For though in the foregoing class an idea is the cause of action (i. e., an inducement for the will to express itself), it need not by any means be an insight into the causal procedure such as is seen from a burnt child dreading the fire as instinctively as the dog the whip, or the bird the rifle. Motivation is found in all these cases, but comprehension none or very little. Where, however, the coming into being, the change, is subject of observation and contemplation, there begins comprehension of the causal process. The narrow bridge which leads to this was the common self-activity of sympathetically attuned aborigines. The bridge was firm, because it connected with the will and the interest which at every hour controlled imperiously the races which were forming languages, and never released them from their bondage. Without this healthy, strong, wild stem of knotty hard wood the noble twig of cognition could never have developed. Our ancient fathers were not singing shepherds or ambulatory natural investigators; they grew up in the hard school of necessity and its constant defense, first, through physical power and then through the increasing power of intellect and comprehension.

This category is the true medium between the first and the third, for it connects unconscious will and instinctive action (of which all organic life consists) first of all with comprehension whose essence is the insight into the causal process, the plain distinction of the two links “cause and effect.” The outer effect, while produced by the changing activity of man himself, presented itself to his view, was, so to speak, produced from his most ancient labor and artistic activity; that effect was an important and decisive step toward objective cognition. Nevertheless, this activity and effective labor was to a great degree unconscious or instinctive, and not until we enter the fourth category will the light of comprehension beam brighter and brighter, illuminating the causal process, thereby elevating and improving this activity in the consciousness of the actively laboring human being. According to the process just described my theory deserves the name of activity theory.

(3) The principle now following corresponds to the third class of Schopenhauer. It concerns the faculty of sense-perception (*Anschauungsvermögen*) awakened, which constantly elevated and improved man’s own activity and its effects. This power derives its ultimate causes singly and solely from the pure forms of time and space. Thus, for instance, in seeing a circle, which should consist of twelve nails placed at equal distances, but of which one is missing, we instantly ask, Why is that nail missing? The powerful ally of art (activity) and mind (logos), namely, imagination, rules as supreme queen in this region. In order that imagination may not grow wild it is bound to the presuppositions of art activity, and that it may not degenerate it is curbed by the strict rule of thinking reason. Placed between these two, action and reason, it tries at all times to encroach upon them, now tempting art to phantastic caprices, then leading thought to irregular roving and groundless suppositions. Now, that to-day all things are viewed in definite forms and outlines; that the whole world is to us not as it is to the animal, a confused

wild chaos without rule, order, and oversight, but a well-ordered system of objects in strict regularity and engaged in incessant reciprocal action—that has become possible alone through imagination. It developed side by side with language and awakening thought from intellectual contemplation of that which was produced by the creative activity of the ancestors of our race. Hence a fitting name for my theory may be the theory of sense-perception (*Anschauungstheorie*).

From the principles (2) and (3) there arose really, as seen in Schopenhauer's theory, perfect causality, the comprehension of which would not have been possible without will and activity, nor without the transcendental scheme of time and space, the armor of imagination. This axiom of the Kant-Schopenhauer theory, so difficult for ordinary comprehension, becomes perceptible by the organs of sense almost, through my theory of the first origin of reason. For there we see the active causality of our will produce effects, create forms half in dream, which then perceived by the senses (passive causality) change into ideas and subsequently enter again consciousness as reflex-activity of the will. But that is no succession of acts or items, although it appears as such, but simultaneous action, the essence of causality and reason. Therefore, one of the most important sides of my theory may be termed the causality theory.

(4) But the most important is still missing—the free, regular, well-organized combination of ideas, a combination which is guided and illuminated by the light of comprehension, in a word, the *logos*. For, despite all unity of causality in the cases heretofore stated, the idea is still closely connected with will, emotion, and immediate sense perception. To liberate the idea from this bondage of coarse empiric reality, to lift it entirely into the ideal sphere, where it can enter into numerous combinations with spiritual liberty, to create this miracle, causality must liberate itself and become a powerful weapon, an ever-ready tool of the human mind.

With the production of ideas and words causality became free. The most ancient words—digging, braiding, binding, separating—have no other content than causal relation, the combination of two concepts formed by sense perception which constitute the causal links, i. e., the *logos*.

The causal relation contained in all ideas and words, i. e., their verbal element, which has its true beginning in their origin in activity, in connection with the substantiality of the ideas themselves, makes possible their combination.

Thus words and ideas unite to form human judgment, and with that we arrive at the first (second) class of Schopenhauer's classification—abstract thought and its ultimate principle, the cause of cognition. But all judgments, be they of whatever nature they are, have as a first presupposition nothing but ideas derived from sense perception, from which they have risen and to which they descend again from their abstract height where they have to find their application.

Combinations of perceptions with perceptions, of ideas with ideas, of judgments with judgments—all this is *logos*, and hence my theory of language deserves the name of *logos theory*.

XIII. GOETHE AND THE GREAT THINKERS.

[By Prof. Rudolf Eucken in Jena.]

[NOTE.—In *Die Zukunft*, a weekly in Berlin, Prof. Rudolf Eucken published recently an oration on Goethe and the Great Thinkers which he delivered before the Goethe Society of Germany. The oration is so replete with practical pedagogical allusions and delineations of psychological processes that it seems most desirable to reproduce it in English to make its contents accessible to American readers. There has hardly been another mind of such magnitude in modern times as that of Goethe's, hence it is interesting and instructive to see how the great

thinkers of all ages, especially of antiquity, have influenced Goethe; how their lofty thoughts have entered his mind and there abided, molding his aspirations, sentiments, and judgment, and thus proving the sublime truth that the civilization and culture of any person or of any nation is inextricably interwoven with the civilization and culture of all ages preceding. The following is Professor Eucken's oration.]

Last year I had the honor to address the Goethe Society on the subject of Goethe and philosophy. My effort then was necessarily circumscribed because confined to the discussion of a specific purpose. It would have led me too far to explain Goethe's relation to the history of philosophy and his connection with the separate great thinkers. This subject has a peculiar charm. It not only allows us to see with great clearness what Goethe tries to find in philosophy and what to him appears great, but it also reflects in characteristic manner in general his way of accepting men and things. It instructs us very lucidly as to what position we have to take toward Goethe if that is to be done in accordance with his own mode of thinking. To the solution of this problem I desire to add my contribution.

We know that Goethe's world of thought was not formed in close adherence to any philosophic system, and, indeed, not out of philosophy at all, but that it arose from the inner necessity of his own nature and the experiences of his life. Still, to an existence founded upon itself a strict seclusion is not suitable. Goethe felt that, for he ever considered himself as one growing (*ein Werdender*). As such he could seek the object of his life in becoming and being more and more at one with himself, open to suggestions, grateful for aid offered him. Freedom in this case was quite in harmony with honest reverence for everything great "which lifts us above ourselves and like a guiding star lights the way ahead." This greatness Goethe found, among other sources, in philosophy, especially in that of the leading philosophers, who stood before him in the impressive totality of their being. That which he sought in them was never mere information, but reanimation and increased vitality for his own actions. This relation had throughout a personal character, because in others he always valued, and from them he accepted and acquired, that which promised aid to his own process of life. In so far Goethe is an eclectic; but he is that only in the sense which he gives to the term, since he called an eclectic "one who accepts of all that surrounds him only that which is in accordance with his nature." But Goethe had the advantage of a very peculiarly individual nature which saved him from unprincipled vacillation and allowed him above all to develop his own life in absorbing alien thoughts. Such absorption was never a passive process with him. It seemed to him characteristic of the living unity of an *entelechy*¹ that "it accepts nothing without acquiring it by additional self-action." Thus to him every recognition of the thoughts of others, like a translation into his own language, becomes thereby an inner transformation.

Goethe was perfectly conscious of this personal nature of his relation to the great thinkers. He wished to delineate not only what these thinkers were in themselves, but what they were to him. He never demanded that the particular mode in which they were reflected in his mind should be authoritative for others. He at the same time reserved to himself the fullest measure of freedom with reference to the great thinkers and declined with the greatest determination to blindly subject himself to them. In point of fact, he thought it quite impossible to completely understand anyone in his own sense. Such sentiments Goethe expressed frequently with the clearness so characteristic of him. While, for instance, he recognized with grateful veneration what he owed to Spinoza, he protested at the same time against accepting all his works or confessing himself to be his disciple: "For that no one understands another; that no one in the same words

¹ An *entelechy* is, according to Aristotle, a self-active being or soul.—*Translator*.

thinks what another means by them; that a conversation, a reading, awakens different thoughts in different persons, I had clearly understood long ago; and it may be taken for granted that the author of *Werther* and of *Faust*, deeply convinced of this disproportion, would not fall into such an error as to claim to have completely understood any man." Of Kant, with whom Goethe, after some reservation, occupied himself more and more, he said: "I merely expressed what he had excited in me, but not what I had read."

One would think that in consequence of such personal manner of acquisition Goethe had abandoned all inner community with others and that truth had been dissolved in him in an infinite number of subjective reflex pictures, but that was not at all his intention. His fundamental convictions offered him a firm support against such a destructive relativism, for throughout his life and work he was impressed with the conviction that as all the fullness of individual formations must be embraced by one universal life, so all the differences of individual comprehension can not annul a common truth; on the contrary, they only confirm it. Though everyone expresses truth in his own language and, in fact, acquires it individually, it still remains the same truth within which we all stand and which we all serve. Thus individuality and universality are not opposed to each other; "everyone can have his own truth, and yet it is the same truth." In this way the thoughts of others may be translated with perfect freedom into one's own language without abandoning their truthful contents.

A lucid example of such a weaving of alien and one's own thoughts is offered us in Goethe's treatment of the æsthetic Hemsterhuis. He said:

I could not make Hemsterhuis's philosophy, his foundations and course of ideas, my own in any other way than by translating them into my own language. Beauty and that which delights us in it is enjoyed when we can conveniently perceive and comprehend the greatest number of ideas in one moment, he said; but I should think beauty is that in which we recognize the life of the individual conforming itself with freedom to that of the social whole (*gesetzmässig Lebendige*) in its greatest perfection, and are thereby induced to reproduction, and feel animated to a like increased activity. Forsooth, the one is the same as the other, only expressed by different persons.

How much more has Goethe made of Hemsterhuis, how has he translated the scholasticism of his theory into that which is purely human, how has he lifted the mere intellectual into general mentality! and yet there is preserved a certain connection—that which is common is noticeable among all differences.

Such personal and individual mode of treatment has undoubtedly its limits. It instructs, strictly speaking, less about others than about Goethe; it results in no consistent representation of the history of philosophy; it is ever in danger of missing the core by attempting to form a collective picture of some captivating impressions of great personalities. This is seen from the famous description and comparison of Plato and Aristotle in Goethe's history of the theory of color. When Goethe here makes Plato, the most fiery and combative of all the ancient thinkers, appear in relation to the world "like a departed spirit who is pleased to abide in it for a while," and when he speaks of Aristotle, the originator of systematic metaphysics, the master of those who know, as one "who regards the world like an architect; one who happens to be here and is bound to create and labor; one who investigates the soil, but only as far as necessary to find bed rock; one to whom all else below down to the center of the earth is indifferent," his pictures are distorted, not only in the details of their execution, but in their fundamental sketching. They are so lamentably out of perspective that only the luminousness of their coloring can make us understand why even in manuals of philosophy they are still quoted as authority.

Such errors arose, in fact, from the circumstance that Goethe departed from the field in which he demonstrated his greatest strength and became didactic. Whenever he stayed within his limits and presented the great thinkers in that which

they were to him personally he stood on firm ground, and then he offered something incomparably more valuable than anything which customary dullness of thought and life is apt to praise as objectivity. His relations to the great thinkers are, in the first place, development of his own being, confessions concerning his own aspiration. We see cycles of thought touch each other; see how syntheses of beings arise; see how life streams from one to the other. The peculiarity of Goethe's mode of thinking is thus comprehended in a special subject, but likewise the other thinkers are made more comprehensible through his contact with them. While Goethe's penetration ever seeks things essential, productive, purely human in his reading; while his seeing consists in discriminating simple principles; while his descriptions cause inner animation, some of this reflex action in his clear and subjective mind also throws back bright light upon the authors he reads; hence they appear in amplified and purer features before our eyes. Now, let us see whether the actual treatment of those thinkers who were most important to Goethe confirms this statement.

Goethe's estimate of Greek character necessarily made valuable to him those, like all the ancient thinkers, who understood how to express in thought the peculiarity of classic intellectual life. Socrates, Plato, and Aristotle—among them especially Plato—of course stand in the foreground. In two respects Goethe felt himself attracted and benefited by them, first, by their great simplicity and unity in contrast to the ramifications and complexity of modern life, which made him greet as an event every approachment to those three intellectual heroes. As he states it, "We find in them that which we feel most joyfully and which will promote our education at all times most powerfully." Yes; as a refuge from the limitless multiplicity, dismemberment, and confusion of modern natural science the question might appear: "What attitude would Plato have assumed toward Nature, as it appears to us in its ever-increasing diversity despite all its profound unity?"

The second point connecting Goethe with the ancients is the synthetic manner in which the close relations of man and world are expressed by them. That famous saying, that the eyes should be sunlike (*sonnenhaft*) to enable us to see light, is not only connected with Plato outwardly; it is the Platonic conviction of the essential relation between soul and world, of a reunion of both in cognition, which governed Goethe's thoughts. In following the ancients in this there took place at the same time a confirmation of his own essential being.

It requires traveling through long periods of time to reach a thinker who influenced Goethe as much as Plato did, but having found him in Spinoza we have also reached the zenith of the whole course of Goethe's development, for with no one else did he enter into such intimate relations as with him; nowhere else did the other become so immediately present in his own life's process as in this case. Goethe confessed more than once that the one thing which attracted him to Spinoza was the peaceful effect he received from him—the atmosphere of peace that seemed to waft to him from Spinoza's works. He derived from him not only invigoration, but restoration, for he felt, especially during the epoch of storm and stress, the compensating placidity of Spinoza as a most beneficent contrast to his own all-exciting aspiration. In later years likewise he liked to flee from the chaos of life and disagreeable impression of alien modes of thinking to this "refuge of old."

Here he found himself aided in the desire to be superior to all partial resignation by means of a placid and pure resignation in a totality; here he was charmed by an unlimited disinterestedness of sentiment; here he saw ideas of the world severed from the trifles of men; here he found all multiplicity embraced by a grand, universal life, and at the same time he found his deep-rooted view confirmed that the divine could not enter the world from without, but that God was to be sought in nature and nature in God. Whatever there was in Spinoza unas-

similative to Goethe the latter simply severed and laid aside without prejudice to his reverence for the philosopher. Thus, for instance, the mathematical turn Spinoza gave to his thoughts; thus the cumbersome armor of his argumentation, and everything which could in any way oppose independence of the individual and freedom of movement. When Goethe abstracts the great intuitions of Spinoza and clings to them he of course presents us only with Goethe's Spinoza, not the universal Spinoza; but is not thereby the immortal truth in the philosopher's life work demonstrated with especial clearness?

Leibnitz recedes far behind Spinoza; but Goethe did not only grow up during an era which was saturated with Leibnitz's thoughts—his own nature contained points of contact with the great monadologist. Especially is this noticeable in his idea of individuality and that of "being-with-oneself in inner life." Who else but Leibnitz blazed the way for the idea that nothing can come into man's mind from without, since "the monads have no windows;" that, on the contrary, all mental progress is an unfolding from within; that man does not live to see things, but himself in the things that surround him? Likewise, through Leibnitz, Goethe certainly acquired the Aristotelian expression of "entelechy," which is to serve as the vessel for that conviction. According to his own methods of procedure, Goethe could accept that estimate of individuality and that idea of the process of life without getting into contradictions with the universal life taught by Spinoza. Another point of contact with Leibnitz is Goethe's exalted valuation of the principle of constancy (continuity) in nature and history. Leibnitz had announced this principle with especial emphasis as his own. However much Goethe differed with him in carrying out this principle, in the fundamental idea he remained his close adherent.

Goethe's individuality demonstrates itself especially plainly in his relation to Kant. The latter's mode of thinking could, from the very beginning of the contact, not be sympathetic for Goethe; nevertheless he succeeded in becoming familiar with it and in deriving much good from it, as soon as a point of contact was found. After Kant's Critique of Pure Reason, lying entirely outside of Goethe's horizon, had produced no strong effect, the point of contact was found in the Critique of the Power of Judgment. Preserving all his self-dependence, Goethe could now enter into inner communion with Kant:

Although it was not always possible to adapt myself and my mode of thinking to the author's, missing a point here and there, yet the fundamental thoughts of the work were quite analogous to my previous doing and thinking. The inner life of art as well as nature, their unfolding from within outwardly, were plainly expressed in the book. The products of these two infinite worlds should exist for their own sake, and that which stands side by side should stand also for each other, but never intentionally opposed to each other.

After thus establishing inner communion, a more positive view of the totality of Kant's work resulted for Goethe. He welcomed thereafter not only the Critique of Pure Reason, but also partly Kant's Philosophy of Nature, many ideas of which he accepted gladly. A new epoch, a new movement, seemed to have been inaugurated by Kant, the influence of which scarcely anyone could escape with impunity. Thus we see that that which had been repulsed at first became a positive factor in the life of Goethe.

Of the successors of Kant no one came nearer Goethe than Schelling. Not only did the great poet praise in the whole of Schelling's method "the great clearness despite its profound depth" (an estimate which to-day is not shared by many), but he received the strongest impulses from Schelling's natural philosophy. If in later years Goethe seemed to see a lack in his former conception of nature—"the idea of the two great driving wheels of nature; the ideas of polarity and growth, the former of matter as far as we think it material, the latter in so far as we think it spiritual"—this progressive movement is evidently owing to Schelling's influence.

But also the general method of Goethe's philosophy is in sympathy with the artistically inclined mode of thinking of Schelling. For the latter's way of placing contrasts prominently before the eye and yet keeping them in live relations, meets the deep-rooted aspiration of the poet to calmly and considerably analyze reality in a series of contrasts, to unfold the various sides and bring them into productive reciprocal action. In my lecture on Goethe and Philosophy I have elaborated upon his way of presenting reality in a large texture of contrasts and complementations. With such positive relations to Schelling, Goethe brushed aside other things of his which were to him as unsympathetic as to us modern men; for instance, the boldness of Schelling's speculations and the hasty superficial manner of his work.

A review over the manifold relations of the great poet to the great thinkers gives at the same time a general review of Goethe's thoughts. From that which he seeks in others it is plainly obvious what philosophy is to him as a whole. It means to him no brooding over hidden causes of things, no stepping outside of the world in order to develop it from his superior point of vantage, but it is to him a taking of an inventory in a world surrounding us with inexhaustible fullness of life. It is to him a clearing up of our relations to ourselves and the world without, and hence it adds to human growth. This is quite in harmony with his prevailing artistic, nay, plastic mode of procedure. Whether this type of thinking may not give fruitful suggestions and additions to philosophy itself, whether it might not promote the scholastic manner of the philosopher's work by transforming it into the purely human (in's *Reinmenschliche*), is a question which can not be discussed here to-day.

But I should like to say a word or two concerning that which Goethe's attitude toward the great thinkers offers for our own attitude toward them, namely, a shining example. Goethe occupied himself with the other thinkers only in the interests of his own development; he accepted them no further than they promised furtherance to his own life; he educated himself with them rather than through them; he always preserved his self-dependence as the most precious of possessions. Accordingly, he himself did not wish to appear to others as a master, but as a deliverer. In this predilection he did not mean to depreciate his own work. Such a man is not honored as he wished to be honored when he is considered a binding authority or a general rule, or when his guiding idea is confused, namely, that the highest effect of the mind is to create mind, or of individuality to awaken individuality. We shall only treat Goethe in the sense of Goethe when we recognize in him, above all, a strong, incomparable individuality and try to assume an independent relation to this individuality; when we take him as an aid to develop in ourselves a clearly distinct type. But to do that we must preserve the same freedom toward him which he preserved toward others and which he by no means considered a privilege of genius. The urgent admonition is not superfluous yet, namely, that we should practice less Goethe worship and enter more into fruitful relations to him, so that we may gain more furtherance for our own life.

XIV. STATE APPROPRIATIONS FOR EDUCATION IN EUROPE.

I. ANNUAL BUDGET OF THE MINISTER OF INSTRUCTION IN RUSSIA FOR 1900.

The expenditures of the Russian Empire estimated for 1900 reached the large sum 1,757,387,103 rubles, against 1,571,732,646 rubles in the preceding year, an increase of 185,654,457 rubles. The appropriation for educational institutions, so far as they belong to the jurisdiction of the minister of education, amounted to 33,180,829 rubles for 1900. This is an increase of 4,419,638 rubles over the previous year.

The following list¹ gives an itemized account of how the 33,000,000 rubles are divided:

[One ruble equals 51 cents.]

	1900.	1899.
	<i>Rubles.</i>	<i>Rubles.</i>
Central administration.....	366, 167	352, 987
Administration of the school provinces.....	622, 182	606, 860
Universities.....	4, 463, 965	4, 108, 045
Secondary schools.....	9, 779, 999	9, 399, 510
Elementary schools.....	6, 484, 623	5, 411, 206
Normal schools.....	1, 269, 598	1, 237, 350
Special schools.....	1, 656, 800	1, 571, 399
Academies of sciences.....	1, 292, 708	1, 260, 470
Preparation of professors.....	1, 793, 506	1, 372, 846
School buildings.....	4, 481, 798	2, 588, 214
Miscellaneous.....	969, 483	852, 234

II. SWITZERLAND AND PRUSSIA COMPARED.

In 1898 the expenditures for the entire system of schools in Switzerland amounted to 43,587,000 francs (1 franc equals 19.8 cents) which, with a population of 2,917,749, shows a per capita of 14.9 francs, or 11.92 marks German money (\$2.84). The expenditures for the primary schools alone amounted to 28,204,996 francs, being 9.7 francs per capita of the population. In the Canton of Zürich the per capita was 19.7 francs, in Basel 18.1 francs, but in Valais only 2.9 francs. Each primary pupil cost 58 francs (or 46.40 marks or \$11.48). In Zürich the per capita per pupil was 113 francs, in Basel 170 francs.

The Kingdom of Prussia spent for its elementary schools 185,917,495 marks (1 mark equals 23.8 cents) in 1896, which is a per capita of the population of 5.84 marks and a per capita of the pupils of 35.50 marks (\$1.39 and \$8.45, respectively). The expenditures for all educational institutions (elementary, advanced elementary, secondary, and higher, except the various special schools) in 1896 amounted to 247,500,000 marks. The population of Prussia at that time was 31,885,123; hence the per capita of the population, 7.77 marks (\$1.85). If Prussia paid as much for education as Switzerland does, it would have to spend 379,713,066 marks for all the schools and 247,195,754 alone for elementary schools.—(Pädagogische Ztg., Berlin.)

III. ANNUAL BUDGET OF THE MINISTER OF INSTRUCTION IN PRUSSIA FOR 1900 AND 1901.

The annual budget submitted to the house of deputies and passed without essential changes closes with a sum total of 153,468,730 marks (1 mark equals 23.8 cents). This shows an increase over the preceding year of 1,359,945 marks. But this sum includes the appropriations for churches, hygienic affairs, universities, secondary schools, as well as for elementary schools. For elementary schools alone the appropriation amounts to 82,074,691 marks, an increase of 373,999 marks over the preceding year. Of course, these 82,000,000 marks represent only the State's contribution, not the taxes raised for school purposes by cities, counties, and other authorities. The following is an itemized statement of the expenditures contemplated for 1901:

	Marks.
(1) Normal schools.....	7, 020, 422
(2) Preparatory schools to normal schools.....	920, 625
(3) Schools for teachers of gymnastics.....	120, 605
(4) School supervision.....	3, 395, 640
(5) Girls' schools.....	230, 000

¹ Zeitschrift für ausländ. Unterrichtswesen.

	Marks.
(6) Elementary schools.....	69,845,147
(7) Schools for the deaf and blind	120,040
(8) Orphan asylums, etc.....	125,712
(9) Funds at the disposition of the minister	296,500
Total.....	82,074,601

For 1901 the budget has been increased, as is seen from the following items: The sum total for elementary schools is now 85,265,261 marks, to which comes a building appropriation of 13,930,171 marks, and other incidental expenditures amounting to about 500,000 marks. It is interesting to notice the various items of the whole budget of which the foregoing are only parts.

Budget of the department of education, worship, and medical affairs.

A. Permanent expenses:	Marks.
Expenses of the department.....	1,253,730
Protestant consistories.....	1,598,695
Salaries for pastors.....	1,737,918
Catholic institutions.....	1,256,300
Salaries for priests.....	1,363,017
Old Catholic churches.....	54,000
Provincial school authorities.....	832,280
Boards of examiners.....	98,636
Universities.....	10,707,352
Secondary schools.....	13,020,675
Elementary schools.....	85,265,261
Art and science.....	5,041,665
Technological schools.....	2,343,301
Education and worship combined.....	17,521,199
Medical affairs.....	2,754,453
General funds.....	273,655
Total.....	145,152,437
B. For buildings and incidentals:	
For the department.....	1,454,250
For universities.....	4,907,186
For secondary schools.....	1,059,120
For elementary schools.....	13,960,171
For art and science schools.....	6,205,049
For technological schools.....	2,028,595
For education and worship combined.....	500,000
For medical and sanitary affairs.....	621,750
Total.....	30,826,121
Grand total for 1901.....	175,978,558
Or an increase over 1900 of.....	22,629,828

IV. COST OF PROFESSIONAL PREPARATION OF TEACHERS IN SOME GERMAN STATES.

The following statistical data are taken from the budgets of the ministers of public education of the larger States of Germany for 1900. The calculations and comparisons can not lay claim to absolute exactness, owing to the variations in the different appropriation bills, their nomenclatures, as well as the variety of organizations of the school systems, which presupposes inequality in many ways and makes uniformity in expenditures as impossible as in similar relations in the United States. The Empire of Germany is a federation of 25 States, each one of which manages its schools independently. For rough calculations, however, a comparative review of the following data may suffice. It is a postulate of German statecraft that the State alone must support the normal schools, aside from tuition fees. No communal, county, or provincial taxation adds to the income of institutions providing the State with teachers, who, being indebted to the State for their professional education, are imbued with the idea that they are morally obliged to uphold the State.

A.—Grand totals of regular expenditures of ministers of worship and education.

Country.	Expenditures.	Per capita of the population.
	<i>Marks.</i>	<i>Marks.</i>
Prussia <i>a</i>	137,619,795	4.32 = \$1.03
Bavaria	29,029,320	4.99 = 1.19
Saxony	19,013,743	5.28 = 1.36
Wurttemberg	12,556,396	6.03 = 1.44

B.—Regular expenditures for education only. The States' quota.

Country.	Expenditures.	Per cent.	Per capita of population.
	<i>Marks.</i>		<i>Marks.</i>
Prussia	112,703,655	81.9	3.54 = \$0.84
Bavaria	21,393,338	73.7	3.68 = .88
Saxony	16,523,858	86.9	4.36 = 1.04
Wurttemberg	7,440,095	59.8	3.57 = .85

C.—The States' quota for education in detail. (b)

Country.	Secondary schools.		Normal schools.		Elementary schools.	
	Marks.	Per cent.	Marks.	Per cent.	Marks.	Per cent.
Prussia	12,355,271	11.0	7,981,048	7.1	74,093,643	65.7
Bavaria	3,682,837	17.2	1,200,139	5.6	10,391,846	48.1
Saxony	3,078,311	18.6	2,058,124	12.5	8,025,847	48.6
Wurttemberg	1,708,067	23.0	388,681	5.2	2,389,084	32.1
Baden <i>c</i>	1,223,890	12.2	264,549	2.6	4,946,207	53.3

D.—State expenditures for normal schools in detail.

Country.	Salaries.		Scholarship and other aids to students.		Buildings and equipment.	
	Marks.	Per cent.	Marks.	Per cent.	Marks.	Per cent.
Prussia	3,763,776	47.2	2,783,937	34.9	1,433,335	17.9
Bavaria	827,229	68.9	102,135	8.5	270,775	22.6
Saxony	1,454,865	70.7	116,780	5.7	486,499	23.6
Wurttemberg	224,225	57.7	133,960	34.5	30,496	14.9
Baden	167,374	69.1	38,710	16.4	58,465	14.5

E.—Per capita for professional preparation of teachers.

Country.	Per capita of population for normal schools per annum.	Per capita of students—		
		In preparatory department per annum.	In normal schools per annum.	During entire term of preparation.
	<i>Mark.</i>	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>
Prussia	0.25	360	599	d 2,889
Bavaria .....	.21	338	505	e 2,024
Saxony .....	.54	(e)	562	f 3,372
Wurttemberg .....	.19	276	555	g 2,217
Baden .....	.14	217	450	h 1,734

a After deducting sums spent for medical affairs.

b In Table C, expenditures for higher seats of learning, administration, etc., are not specified; hence the partial sums for the three categories of schools are not equal to the total amount paid by the State for education.

c The regular expenditures for education amounted to 9,299,932 marks.

d The assumption is that a normal school student before his admission has spent three years in the preparatory school; but many come from secondary schools, and hence the quota for preparatory courses is only 11.46 per cent of the total costs of the professional education of teachers in Prussia.

e Saxony has no preparatory departments in normal schools.

f Saxony pays comparatively more for the preparation of teachers than the other States. The course of a normal school in Saxony is one of six years, while in the other States it is one of four years.

V. BUDGET FOR EDUCATION IN ITALY IN 1901.

The budget passed by Parliament for 1901 provides for a total appropriation of 47,334,294 francs, which is an increase of 1,651,609 francs over last year. From this sum total should be deducted the burdens "del debito vitalizio," which would leave 44,519,299 francs to be expended. This is equal to 1.40 francs per capita of the population. Of these expenditures 6.21 per cent are for administrative purposes, 26.1 per cent for elementary schools, 35.5 per cent for secondary schools, 18.71 per cent for normal schools, 3.98 per cent for scientific purposes, 10.31 per cent for art and archeology, and 0.18 per cent for unspecified purposes. In order to judge this rightly, it should be stated that in Italy the elementary schools are almost wholly supported by the communities, and that the provincial governments share in the expenses for scientific and technological schools.—(Pädagog. Ztg., Berlin.)

XV. MISCELLANEOUS TOPICS.

Contents: Health and Mortality of Teachers.—Continuation Schools in Germany.—Growth of German National Teachers' Union.—Cost of Free Text-books in Zürich.—Sons of Laborers in German High Schools.—Teachers' Salaries in Prussian Cities.—German University Students.

I. HEALTH AND MORTALITY AMONG TEACHERS IN BERLIN.

Dr. H. Schröder, of Kiel, an untiring worker in behalf of the interests of high-school teachers in Prussia, has in numerous pamphlets and magazine articles referred to the disregard of teachers in contrast to other State officers of university education, and makes a demand of the State for better pay and shorter hours. His reason for the latter-named demand is the great mortality among high-school teachers. By means of statistical tables, he proves that their strength or vitality declines much sooner than that of judges, army officers, etc. Such statements are not easily prepared, as official statistics do not specialize the professions as well as might be desired. The untiring energy of Dr. Schröder, therefore, deserves recognition beyond what the actual figures suggest. Even if exact comparative statistics are impossible, a cursory comparison of the figures given with those applying to elementary school-teachers proves conditions among the latter to be still more unfavorable. Unfortunately, teachers have attached too little importance to this subject, and hence they are now beginning in Germany to keep an exact account of the death rate and pensioning of public school-teachers, so as to define how soon their vitality is expended as contrasted with other officers or employees of the Government.

As a matter of course, a distinction must be made between cities and country.¹ Large cities in particular must be treated appropriately to their individual conditions. For Berlin a teacher, Mr. Gaulke, has prepared a statement giving the average term of life, for a number of years, of principals and teachers deceased. The figures do not refer to calendar but to school years (May 1 to April 30); however, that fact is of no significance, and that the averages specified for the years 1867 and 1871 refers only to the members of the union of communal teachers affects their importance but little. Here is the table:

Years.		Years.		Years.	
1867	39	1882	42	1891	46
1868	37	1883	37	1892	42
1869	33	1884	37	1893	51
1870	39	1885	44	1894	48
1871	46	1886	50	1895	44
1878	41	1887	42	1896	51
1879	49	1888	53	1897	51
1880	42	1889	41	1898	49
1881	40	1890	47		

¹ See article on this subject in Ann. Report of 1898-99, vol. 2, p. 1488.

This table proves in the first place that mortality was much greater in former years than now. From 1866 to 1886 there is only one instance of a year in which the average age was 50 years. The reason is that mortality is less among the population of Berlin in general, because of improved sanitary conditions. Moreover, in former years the energies of teachers were used up to a much greater extent in private schools with deficient hygienic arrangements.

Salaries naturally exert an influence on mortality; the lower the pay the more time teachers are induced to devote to outside occupation. As a matter of course, a greater amount of vitality is thus expended, and those whose health is not very strong consequently die an earlier death than they otherwise would. The moral is self-evident.

The foregoing table is deficient in the one respect, that the calculations upon which it is based include only teachers who died in office. Exact deductions are therefore impossible. To give the consumption of vitality with any degree of definiteness the three following groups must be considered: (1) The average age of all deceased teachers; (2) the average age of those who died in active service, and (3) the average of those retired. The last point is one of great importance, and would no doubt furnish astonishing facts. It is to be regretted that no pertinent statistics of earlier decades are available. Late investigations define the ages of principals and teachers retired since October 1, 1896, with the following result:

One pensioner was between 25 and 34 years old; 8 pensioners were between 35 and 44 years old; 5 pensioners were between 45 and 54 years old; 15 pensioners were between 55 and 64 years old; 19 pensioners were between 65 and 74 years old; 3 pensioners were over 75 years old.

According to the pension law of 1885, pensions can be granted to teachers under 65 years of age only if the school authorities, upon conscientious investigation, decide that they are permanently unfit for the duties of their position because of physical defects or physical or mental infirmity. Since October 1, 1896, 58 per cent, or more than half of the number of pensioned teachers and principals, were retired because of sickness before they reached the sixty-fifth year of life. Only 42 per cent preserved their health in active service till their sixty-fifth year.

Even considering that mortality among the entire population is greatest between the ages 35 and 44, the proportionately large percentage of teachers retired at that age is most striking. There would be many more instances of disability on account of failing health among the teachers of Berlin if school boards were not so liberal with granting furloughs, and were less generous in decreeing compulsory retirement. According to the official report of the city board, April 1, 1897, till April 1, 1898, as many as 19 principals and 103 teachers were allowed longer summer vacation for reason of health. During the same year 531, namely, 23.02 per cent, of 2,307 teachers were furloughed for some time on account of sickness. The following table gives the details:

Number of teachers ill.	Per cent of whole of same age.	Number of days ill.	Age of teachers ill.
65	20.06	1,785	20-29
182	19.78	6,008	30-39
134	21.54	5,189	40-49
106	32.72	3,711	50-59
44	37.61	1,550	60 and over.

In former years, corresponding figures showed the following results: Extended summer vacations were granted on account of health to 29 principals and 108

teachers in 1891-92, 22 principals and 81 teachers in 1892-93, 26 principals and 104 teachers in 1893-94, 20 principals and 109 teachers in 1894-95, 17 principals and 93 teachers in 1895-96, 18 principals and 101 teachers in 1896-97.

The following table gives particulars concerning furloughs on account of sickness during the year when school was in session:

Year.	Teachers.	Per cent.	Aggregate number of days.
1894-95 <i>a</i>	490	22.25	18,813
1895-96	442	19.75	19,402
1896-97	475	20.86	20,712
1897-98	531	23.02	18,243

a Reports of earlier years do not include these statistics.

Though these figures prove that the condition of health among elementary teachers in Berlin is no worse than in former years, still the number of sick, including from one-fifth to one-fourth of principals and teachers, is proportionately large.

Diseases which may be designated as diseases peculiar to the profession are disorders of the eye, throat, and nervous system.

Year.	Eye diseases.	Throat diseases.	Nervous diseases.
	<i>Cases.</i>	<i>Cases.</i>	<i>Cases.</i>
1894-95	16	68	76
1895-96	17	68	66
1896-97	13	109	89
1897-98	17	109	74

The great increase of throat troubles and laryngitis is particularly noticeable; if the increase continues, the question will naturally arise whether the evil is not due to existing school arrangements. Meanwhile it is reasonable to suppose that the high figures for the last two years are merely accidental.

In conclusion we may consider the mortality among the teachers in other German cities. In Leipzig, for the year 1897-98, the average age of teachers who died in active service was 40 years; in Dresden, from January 1, 1883, to April 15, 1898, it was 49 years and 7½ months; in Hamburg, in 1898-99, it was 42 years. In Leipzig the average age of pensioned teachers for the same period was 67 years; in Dresden, 53 years. Further comparisons are unfortunately impossible. The figures given have been taken or calculated from the teachers' rolls of the cities mentioned. The teachers of Berlin are urging those of other German cities to recommend that statistics referring to mortality in the teaching force be inserted in the official reports.

Since the foregoing was prepared the official statement concerning the year closing April 1, 1899, for Berlin has been published. The following items are taken to complete the foregoing statement: For considerations of health the summer vacation was prolonged for 29 principals, 135 male teachers, 145 female teachers, and 21 female teachers of woman's handiwork. Including furloughs granted during the year the numbers swell to 575 male teachers, inclusive of principals; 474 female class teachers, and 85 female teachers of handiwork; making a total of 1,134 teachers who were furloughed on account of sickness. The furloughs covered

42,037 days, averaging, therefore, 37 days to one teacher. The furloughs are distributed as follows:

Month.	Male teachers.		Female teachers.		Handiwork teachers.	
	Number.	Days.	Number.	Days.	Number.	Days.
1898.						
April	43	881	35	605	9	124
May	80	1,110	63	1,444	11	181
June	124	2,073	108	1,871	11	225
July	110	3,415	85	2,598	11	330
August	184	2,643	66	2,783	23	338
September	87	1,707	95	1,948	11	195
October	73	1,110	81	1,244	11	126
November	58	899	58	1,069	11	151
December	256	1,137	67	1,507	11	249
1899.						
January	91	1,215	92	1,361	17	192
February	99	1,462	111	1,803	22	196
March	92	1,740	87	1,750	18	355
Total		19,392		19,963		2,662

The following table gives the ages of the furloughed teachers:

Age.	Male teachers.	Female teachers.	Teachers of handiwork.
20 to 29	745	745	67
30 to 39	842	595	175
40 to 49	613	333	150
50 to 59	246	112	74
60 and over	81	20	21

The following table states the most prevalent diseases:

Disease.	Male teachers.	Female teachers.	Teachers of handiwork.
Throat	91	93	29
Heart	21	3	-----
Influenza	87	85	23
Catarrh of lungs	19	16	-----
Catarrh of stomach	18	21	1
Nervous disorder	99	79	23
Rheumatism	25	28	10

II. CONTINUATION SCHOOLS IN GERMANY.

Table showing population 14 to 18 years of age, and attendance at continuation schools.

States and provinces of Germany.	Population 14 to 18 years of age.								Number attending continuation schools, exclusive of those attending secondary institutions or preparatory schools.				
	Male.				Female.				Industrial.	Commer- cial.	Agricul- tural.	General.	Girls.
	Single.	Married.	Widowed.	Divorced.	Single.	Married.	Widowed.	Divorced.					
Prussia	1,257,553	344	8	---	1,042,866	2,963	87	6	154,297	17,029	23,881	5,000	14,408
East Prussia.....	79,667	41	1	---	79,111	299	10	1	5,631	275	549	---	327
West Prussia.....	62,096	17	---	---	61,408	288	11	---	7,626	469	472	---	285
City of Berlin.....	51,750	2	---	---	58,096	123	6	---	21,353	2,069	379	5,000	7,268
Brandenburg.....	102,969	19	---	---	99,471	191	8	---	6,424	658	742	---	82
Pomerania.....	96,111	12	---	---	63,346	130	2	---	3,619	351	430	---	158
Posen.....	79,671	57	2	---	80,402	442	15	1	5,464	312	565	---	340
Silesia.....	178,171	40	2	---	180,290	469	16	2	15,755	3,239	2,234	---	919
Saxony.....	105,270	23	---	---	102,928	204	2	---	12,258	2,171	1,281	---	425
Sleswick-Holstein.....	49,755	13	---	---	47,488	111	---	---	8,006	463	827	---	770
Hanover.....	94,655	42	1	---	92,219	191	---	---	15,874	2,280	3,506	---	323
Westphalia.....	110,939	13	---	---	102,831	278	9	1	13,415	1,342	1,736	---	395
Hesse-Nassau.....	71,897	10	---	---	73,219	65	---	---	15,154	1,379	5,553	---	1,785
Rhine-land.....	201,924	55	2	---	197,225	317	8	1	24,636	2,030	5,020	---	1,271
Hohenzollern.....	2,687	---	---	---	2,923	2	---	---	182	21	537	---	50
Bavaria	229,675	---	---	---	234,054	291	4	---	35,986	3,024	7,087	128,051	167,450
Saxony	143,620	---	---	---	148,179	140	---	---	20,779	4,871	691	76,994	4,041
Württemberg	86,479	---	---	---	89,272	40	---	---	16,662	1,938	396	31,176	54,016
Baden	71,206	---	---	---	70,591	48	1	---	9,489	1,500	567	25,649	13,611
Hessa	43,612	5	---	---	43,415	69	---	---	8,976	865	307	25,288	300
Mecklenburg- Schwerin.....	24,314	---	---	---	22,817	54	---	---	3,880	164	52	---	40
Saxe-Weimar.....	13,232	---	---	---	13,695	28	---	---	1,884	226	90	5,152	46
Mecklenburg-Strelitz.....	4,352	---	---	---	4,180	10	---	---	1,447	14	---	---	---
Oldenburg.....	22,868	2	---	---	14,619	27	1	---	770	50	277	50	20
Brunswick.....	16,891	---	---	---	16,539	26	1	---	1,995	214	50	250	317
Saxe-Meiningen.....	9,466	6	---	---	9,638	20	---	---	267	89	98	4,199	249
Saxe-Altenburg.....	7,042	---	---	---	6,968	15	---	---	476	50	50	482	---
Saxe-Coburg-Gotha.....	8,887	3	---	---	8,656	13	---	---	624	182	---	3,720	317
Anhalt.....	11,363	---	---	---	10,600	12	---	---	1,403	137	---	---	---
Schwarzburg-Son- dershausen.....	2,994	---	---	---	3,065	8	---	---	304	50	---	1,199	---
Schwarzburg-Rudol- stadt.....	3,510	---	---	---	3,341	5	---	---	268	---	---	463	20
Waldeck.....	2,329	2	---	---	2,463	4	---	---	75	---	126	1,094	---
Reuss, senior line.....	2,506	---	---	---	2,489	8	---	---	350	70	---	---	---
Reuss, junior line.....	4,994	---	---	---	4,900	15	---	---	821	198	120	294	174
Schaumburg-Lippe.....	1,590	---	---	---	1,545	17	---	---	---	---	30	65	---
Lippe-Deinold.....	5,618	---	---	---	5,392	7	---	---	722	---	---	---	---
City of Lübeck.....	3,390	---	---	---	3,061	4	---	---	1,213	220	30	23	---
City of Bremen.....	8,160	---	---	---	8,313	7	---	---	1,779	333	---	---	---
City of Hamburg.....	21,588	---	---	---	23,360	75	1	---	3,543	858	---	---	480
Alsace-Lorraine.....	63,303	---	---	---	63,798	124	3	---	2,908	590	416	1,311	450
The Empire	2,032,552	362	8	---	2,053,982	4,182	106	6	170,718	32,672	34,688	170,440	255,943

Grand total, 664,461.

III. INCREASE IN THE NUMBER OF WOMEN TEACHERS IN GERMAN CITIES.

The Statistical Yearbook of German Cities for 1900 gives a review of the status of women teachers in cities over 100,000 inhabitants from which the fact is noticeable that the ratio of women to men is different in various portions of the Empire. Catholic provinces of Prussia and Catholic States outside of Prussia have many more women teachers in their city schools, while in the Protestant parts of the Empire their number recedes. The following table is instructive. Protestant cities, like Duisburg in Rhenish Prussia and Zwickau and Plauen in Protestant Saxony, have very few women teachers, while Catholic cities like Freiburg, Aix-la-Chapelle, Metz, Strasburg, Cologne, and others have a good many. Thuringia has very few women teachers.

Ratio of women teachers to men teachers.

Low ratio:	Per cent.	Medium ratio:	Per cent.	High ratio:	Per cent.
Nuremberg.....	2.5	Magdeburg.....	18.0	Altona.....	57.4
Chemnitz.....	2.9	Bremen.....	19.7	Düsseldorf.....	81.8
Plaue.....	5.0	Görlitz.....	23.3	Lübeck.....	85.2
Zwickau.....	5.4	Barmen.....	23.3	Cologne.....	89.6
Duisburg.....	5.8	Brunswick.....	24.8	Strasbourg.....	90.1
Medium ratio:		High ratio:		Metz.....	91.9
Leipzig.....	10.7	Kiel.....	50.3	Aix-la-Chapelle.....	97.9
Wiesbaden.....	10.9	Hamburg.....	54.5	Freiburg.....	134.9

IV. GROWTH OF THE GERMAN NATIONAL UNION OF TEACHERS.

In its yearbook of 1900 the German Teachers' Union states that the membership has risen from 76,523 in 1899 to 80,251 in 1900, or about 4.87 per cent. The Prussian Teachers' Union, a branch of the former, has increased its membership during the same period from 48,710 to 51,612, or 5.96 per cent. The following table shows the growth of both associations during the last decade:

Year.	National Union.	Prussian Union.	Year.	National Union.	Prussian Union.
1890.....	38,912	30,450	1896.....	62,274	43,082
1891.....	44,440	35,512	1897.....	64,906	44,953
1892.....	49,636	39,410	1898.....	67,271	46,610
1893.....	53,023	40,470	1899.....	76,523	48,710
1894.....	55,134	41,081	1900.....	80,251	51,612
1895.....	60,797	42,240			

The increase in ten years in the National Union amounted to 41,339 members, or 106.24 per cent; that of the Prussian Union 21,162 members, or 69.49 per cent. In a number of States and provinces every teacher (except the women teachers, who have a union of their own) is a member; in others very few teachers are still outside the union. These unions are not loose associations that count as members those who attend annual meetings, but both are firmly organized into local and state associations, each of which maintains intimate relations with the central management. In annual or biennial meetings only delegates of state, provincial, and local societies can vote. The influence of the union upon school legislation has greatly increased. It must be understood, though, that the members of the union are only the teachers of elementary schools; secondary teachers and professors in higher institutions are not members, nor do they participate in the deliberations of the union. Teachers of secondary schools have their own associations, one representing classical, the other modern realistic high schools and academies. Professors of universities, again, come together in their association for the advancement of science.

V. COST OF FREE TEXT-BOOKS IN ZURICH.

The annual reports of the school authorities of Zurich, Switzerland, give information concerning the cost of free text-books and stationery for the pupils of the lower city schools. In 1896 the cost for each primary pupil was 0.91 franc for text-books and 1.50 francs for stationery and drawing material, a total of 2.44 francs. In the grammar schools the books for each pupil cost 5.03 francs, the stationery and drawing material 7.39 francs, a total of 12.42 francs. In the year 1899 the cost for books in the primary schools was 1.23 francs per pupil and 2.74 francs for stationery and drawing material, a total of 3.97 francs. In the grammar schools the cost had increased to 6.28 francs for books and 7.48 francs for the other material, a total of 13.76 francs. For material used in the lessons in female hand work (worsted, needles, thread, shirting, etc.) 1.86 francs per pupil was expended in primary schools, 2.96 francs in grammar schools. Hence the city spent about 3 to 4 francs for every boy in primary schools and for girls 5 to 6 francs. In 1899 the total cost amounted to 103,075 francs (about \$20,000) for 14,833 children in the primary and 2,471 children in the grammar schools. The

latter schools are parallel to our seventh and eighth year grades. The expenses for this purpose rose from 86,068 francs in 1894 to 87,541 francs in 1895, 87,480 francs in 1896, 98,809 francs in 1898, and 103,075 francs in 1899. Zurich has at present a population of between 160,000 and 170,000. The elementary schools of Zurich are among the best in Switzerland. Hence it is reasonable to suppose that the expenses for similar purposes in other cities of the Republic are not any higher than in Zurich. Both teachers and parents are well satisfied with the result of this comparatively new policy of the school board, the former because they now have a much-desired uniformity in the stationery and books, the latter because the cost is much decreased and is paid indirectly by all the taxpayers.

VI. SONS OF LABORERS IN GERMAN SECONDARY SCHOOLS.

Mr. Bernhard Harms, in Tübingen (Wurttemberg), Germany, has made an inquiry (by circular letters to the principals) as to the number of students in secondary schools in the two Kingdoms, Prussia and Wurttemberg, whose fathers are artisans, i. e., follow a trade, either as master or assistant. The question is of importance both to the educator and to the economist, inasmuch as the result of the inquiry would show the relative position of the laboring people in the national aspiration toward advanced education. Of 600 circular letters sent out 330 came back with minute replies. While thus it would seem that any tabulation of these replies can only embrace a partial statement of the conditions found, yet if it is taken into consideration that replies came from every province of Prussia and from every subdivision of Wurttemberg, and that Prussia represents the north, while Wurttemberg represents the south of Germany, it is reasonable to say that the results as stated below are fairly representative for the whole German Empire, especially since the tables state the number for twenty-five years, i. e., from 1876 to 1900.

The results are these: Among 143,135 students in high schools of all kinds there were 15,668 sons of tradesmen (artisans), 10.5 per cent. While the number of sons of those not following trades increased constantly and regularly, the number of sons of tradesmen vacillated according to the condition of depression or expansion of industry. During the period of depression (1881-1885) a great decrease was noticed, during the period of great industrial expansion an enormous increase. Another difference is quite obvious: Few sons of tradesmen enter the classical (Gymnasia) and semiclassical (Realgymnasia) high schools, but in realistic or modern high schools (Realschulen) the increase in the number of tradesmen's sons amounted to 214.3 per cent in recent years. A few details are interesting: Sons of bookbinders show an increase of 150 per cent; printers, 400 per cent; watchmakers, 337.5 per cent; bakers, 288.8 per cent; butchers, 211.4 per cent; shoemakers, 170.4 per cent; tailors, 435.3 per cent; locksmiths, 466.6 per cent; painters, 481.8 per cent; joiners, 425 per cent; other trades, 129.8 per cent.

The general summaries of the author's tables show that attendance at classical high schools during the last twenty-five years of sons of artisans has decreased, but that it has disproportionately increased in so-called modern high schools in which modern languages have replaced the classical.

In Wurttemberg a similar observation is made, only that the number of artisans sons is very much larger in the high schools of that Kingdom, being 20.6 per cent of the whole number of students, or about twice the number of those in Prussia. This is owing to the fact that trades and home industry have been preserved in Wurttemberg better than in Prussia, where factories on a large scale have replaced home industries. Altogether, it is not a bad showing, for when 10.5 per cent and 20.6 per cent, respectively, of the students are sons of laboring people who can afford to send their boys to the high schools, where heavy tuition fees are charged, it is a sign of healthy and worthy aspiration.

VII. SALARIES OF TEACHERS IN PRUSSIAN CITIES.

The following figures represent the salaries of regularly appointed elementary teachers in towns and cities of over 12,000 inhabitants of the Kingdom of Prussia. It does not include the salaries of principals of graded schools nor of probationers. The numbers are grouped according to the 13 provinces of the Kingdom, Berlin being a province of itself. The amounts stated are cash salaries, exclusive of free rent, or rent indemnity, which is usually valued at 25 per cent of the cash salary a teacher receives.

Provinces of Prussia.	Salary at beginning of service.	More or less than the average in the Kingdom.	Periodical increases.	More or less than the average in the Kingdom.	Average salary per year for 25 years of service, including columns 2+4.	More or less than the average in the Kingdom.
Averages for the Kingdom.	\$298.21	-----	\$40.70	-----	\$474.81	-----
Westphalia.....	329.15	+ \$30.94	44.03	+ \$3.33	521.22	+ \$46.41
Rhenish Prussia.....	323.92	+ 25.71	40.70	.00	499.81	+ 25.00
Hesse Nassau.....	317.26	+ 19.05	46.65	+ 5.95	519.08	+ 44.27
Sleswick-Holstein.....	307.97	+ 9.76	43.55	+ 2.85	496.71	+ 21.90
Brandenburg.....	292.00	- 6.21	42.38	+ 1.66	475.53	+ .72
Hanover.....	290.12	- 8.09	41.18	+ .48	467.91	- 6.90
Posen.....	285.60	- 12.61	38.32	- 2.38	451.25	- 23.56
Berlin (city).....	285.60	- 12.61	38.55	+ 22.85	560.73	+ 85.92
Silesia.....	279.17	- 19.04	38.32	- 2.38	445.30	- 29.51
Pomerania.....	277.74	- 20.47	35.94	- 4.76	433.40	- 41.41
Prussian Saxony.....	259.42	- 38.79	38.56	- 2.14	426.50	- 48.31
West Prussia.....	259.18	- 39.03	37.13	- 3.57	419.60	- 55.21
East Prussia.....	253.23	- 44.98	37.13	- 3.57	413.88	- 60.93

VIII. GERMAN UNIVERSITY STUDENTS.

In all the twenty-one German universities, including the Academy of Münster, which has only a theological and a philosophical faculty, there were in 1900 (summer semester) no less than 34,339 matriculated students and about 10,000 non-matriculants or hearers; in 1899, only 33,563. This is an increase which represents almost exclusively the native contingent, for while the number of foreigners rose from 2,284 in 1899 to 2,322 in 1900, i. e., an increase of 38, the increase of native students is 788. Ten years ago, in 1890, the German students, not counting foreigners, was 27,463; this number decreased to 25,553 in the winter of 1893-94; from that year on the increase was steady and large. Taking the number of 1890 as a basis, it is found that the increase within ten years has been 16.7 per cent.

In attempting to compare the attendance at the several faculties it is necessary to confine the calculation to the Prussian universities. The following review gives for each group three numbers, (a) the number for 1890; (b) the numbers of 1899, and (c) those of 1900. It will be noticed that the chief groups of the philosophical faculty are separated.

Students in Prussian universities.

	1890.	1899.	1900.
Protestant theology	2,652	1,429	1,314
Catholic theology	643	950	811
Law	3,106	5,294	5,580
Medicine	5,172	4,410	4,158
Philology and history	1,534	2,273	2,371
Mathematics and natural science	1,207	2,300	2,323
Pharmacy	580	736	755
Agriculture <i>a</i>	386	521	535
Forestry <i>a</i>	64	192	232
Dentistry and Veterinary surgery <i>a</i>	203	298	322
	15,412	18,303	18,401

a These numbers represent only those who study at the university. There are independent agricultural, forestry, and veterinary schools not affiliated with the universities in Prussia and other German States.

The following comparison is interesting, owing to the details it offers for several German States:

Students in every 100,000 inhabitants.

States.	Law.	Medicine.	Philology and history.	Mathe- matics and natural science.
Prussia.....	17.5	13.5	7.4	7.3
Bavaria.....	18.7	14.5	11.1	7.7
Saxony.....	21.2	11.9	10.4	8.1
Wurttemberg.....	13.9	12.9	3.9	5.7
The whole Empire.....	18.3	13.9	8.4	7.8

Prussian students studying in other States.

	Per cent.	
Medicine.....	37.6	} A total of 29.3 per cent (or 13,004) Prussian students studying in Bavaria, Saxony, Wurttemberg, Baden, Hessa, etc.
Pharmacy.....	37.4	
Mathematics and natural science.....	36.6	
Law.....	29.8	
Catholic theology.....	13.8	
Protestant theology.....	13.6	

In view of the fact that among the 2,284 foreigners studying in German universities, in 1900, there were about 300 from America (not exclusively from the United States), it is of interest to note an opinion expressed in the New York Evening Post of April 22, 1901, which refers to the value of attendance at German universities. The article is here quoted in full:

HIGHER EDUCATION MADE IN GERMANY.

M. Gaston Deschamps, in his very entertaining account of recent lecturing experiences in the New England colleges, expresses his surprise at the dependence of American upon German scholarship. At Yale, for example, he found that they knew and used the German standard text-books on all subjects, ignoring the French, and generally that in all the higher studies the university looked to Germany. M. Deschamps adds, with a certain bitterness, that the French, who for a generation have done nothing but advertise German methods, are to blame for their own lack of honor in America. M. Deschamps has correctly observed the fact. In a score of lecture rooms to-day American professors trained in Germany are lecturing in an English intelligible only on condition of having first learned German, and hundreds of incipient doctors of philosophy are seeking their academic salvation in "Grundrisse," "Abrisse," "Aufsätze," and "Abhandlungen." But the French observer has curiously misjudged the cause and the importance of this fact of the partial Germanization of the American university.

When Edward Everett and George Bancroft, early in the last century, went to Göttingen, they went not so much for definite facts as for inspiration, and the movement of which they were pioneers has been a veritable evangel of sound learning. As Americans, our inheritance was a certain contempt for science and an invincible confidence in rule of thumb—"the English notion," as Matthew Arnold called it, "that you can do a thing right by doing it, and not first by learning how to do it right, and then doing it." This swaggering insouciance our social conditions have tended to exaggerate, and if it has been corrected, it is largely due to that spirit of disinterested love of science, and of confidence in the ultimate value of the orderly search for any kind of truth, which America has since learned from Germany. Professor Paulsen, of Berlin, says that you find in the German university "the spirit of inwardness—the calm delight in her employment, the faithfulness of work, and the love of truth." These were things worth studying and worth imitating. And it was properly and worthily the ideal of every young scholar—American, French, or Italian (the English only were blind)—in the fifties, sixties, and seventies, to study in a German university and bring back its degree.

What they sought, to be more specific, was the vaunted scientific method—wissenschaftliche Methode. This formidable phrase meant chiefly thoroughness, the willingness to count no fact small and no effort great in the search for truth. It meant, besides unsparing industry in the mere accumulation of facts, a certain

constructive quality of mind which mastered the facts and set them in philosophical relations. These qualities the great German scholars, the Grimms, the Diezes, the Rankes, had preeminently; and they held themselves—their knowledge and ideals—at the disposal of every youngster who sought the life of research. It is one of the proudest titles of American scholarship, that it early recognized that intellectual good was to be found in Germany; that it sought it there and brought it back to be a fruitful principle of our own intellectual life.

To deplore the fact that our scholarship has a strong German tinge would be like apologizing for the loins from which we sprang. And yet it is a question if of recent years we have not followed German methods too exclusively and too unintelligently. You may crack a filbert with a trip hammer; you may put *wissenschaftliche Methode*, too, to the most trivial uses. The Germans themselves often so misuse it. Scholarship suffers from an enormous overproduction of monographs in which an ambitious method stretches a thin substance to the cracking point. As Kant imagined a pure reason (*reine Vernunft*), so we are in danger of coming down to pure method (*reine Methode*). There is a craze, not to prove something valuable, but merely to prove something. What shall be said of the graduate student who sorts and weighs the descriptive adjectives in a popular novel of the day, and proves that on a basis of a thousand the rose is red 333 times; crimson, 197; blushing, 69; of him who shows that the average sentence length of, say, Thomas Hardy was 24.56 at the period of *A Pair of Blue Eyes*, but had risen to 25.46 by *Jude the Obscure*? Yet such things are done among us in the name of scholarship.

It would not be fair to hold the Germans wholly responsible for such caricature of their method. But they themselves are ready to acknowledge a defect in their scholarship which ours has not escaped. Large intelligence has always been the characteristic of the German scholar. A fine sense of form has rarely been his. The enthusiasm which carries him to a difficult result expires when the result is reached, and the scholar who will give ungrudgingly a lifetime to the discovery of a new principle often grudges the time to present that principle clearly and attractively to his colleagues—so much so that it is sometimes as difficult to read the account of a research as to conduct the research anew. This comes partly from a defect in national temperament, but even more from the fact that the German scholar writes only for scholars, and evades the discipline of writing for the larger educated public. In his scorn of the popular he is likely to fall into the obscure.

Now the sense for form is almost as much a matter of good morals as it is of good taste. French scholarship has it in a high degree. Not only are learned works clearly and logically constructed from a scientific point of view in France, but the most erudite scholars write in a style to be read with pleasure by the average person of culture, and condescend to present the results of their investigations in popular form. The result is a type of scholar with a juster sense of proportion, a better knowledge of the world in which he lives, and, without any impairment of his position as a specialist, with a far greater influence than is commonly the portion of the German scholar of equal rank.

We have surely gone too far the German way, and when M. Deschamps pokes fun at the German flavor of higher studies at Yale, he touches a sore spot. It is well for us that we have made our own everything that is good in German scholarship. But loyalty to our foster fatherland need not extend to imitating its defects and accepting its limitations. It is a hopeful sign, from this point of view, that our graduate students look in increasing numbers toward France. French scholarship—and our own traditions may well reinforce the lesson—has this to teach us, that there should be discrimination even in the ardent search for truth, and that a slovenly presentation of results demeans the most notable investigation. Nothing our universities have learned from Germany is to be disowned: an added grace is to be sought—the admirable clearness, intelligence, and attractiveness of Latin scholarship.

CHAPTER II.

A LEGISLATIVE HISTORY OF THE PUBLIC SCHOOL SYSTEM OF THE STATE OF OHIO.

[Compiled from the Session Laws enacted by the General Assembly. By Mary L. Hinsdale, A. M., graduate student of the University of Michigan, with historical notes by the late B. A. Hinsdale, Ph. D., LL. D., professor of the science and the art of teaching in the University of Michigan, supplemented by Mary L. Hinsdale.]

PREFACE.

What is called the American system of public schools or of public instruction, strictly speaking, is rather an idea than a fact. At most it is a fact of the human mind and not of history or objective life. It is a conception that combines the essential or characteristic features of our principal State systems of public schools. This conception is formed by the familiar processes of observation, analysis, comparison, and generalization. It is not found pure and simple in the system of any one State, but some of these systems approach it much more nearly than others. We may, however, here avoid metaphysical distinctions and speak as though this system had external reality.

This system is a recent growth. There were, indeed, anticipations of it in a few of the States, beginning with early colonial days; but, generally speaking, there is no trace of it until the present century. More narrowly, it is practically the work of two-thirds of the century, for it was not until about 1835 that the great common school movement in the United States began.

To enter upon a full account of the origin and development of this system would be to enter upon a very difficult task. It would involve the careful comparative study of many thousand volumes of school laws and reports and other similar documents, together with the personal history of the principal men who have contributed to the work. A similar account of the system of a single State is at once a far less onerous undertaking, although by no means a slight one, while it also has some points of superior interest. For one thing, the subject in such case is an individual, concrete reality, and is, therefore, free from the abstractness of the more general inquiry. This will appear in the sequel. The present chapter is devoted to the school system of the great State of Ohio. It does not attempt, however, to deal exhaustively with the origin and development of this system, since that would include results and much other matter that it has been found necessary to omit. It is, rather, the origin and development of this system as a legal organization. Again, it has been found necessary, as a matter of course, to sink a vast number of details of legislation in the general account. Manifestly, to note each smallest forward or backward step was as unnecessary as it was impossible. And yet the facts used have been so chosen and combined that they furnish a full and, it is believed, a luminous view of the subject. The chapter rests immediately upon the enactments of the general assembly, and not upon

secondary sources of information. As the dates of the legislation described are sure guides to the session laws containing these enactments, it has not been found necessary to refer to them by volume and page in the footnotes.

I. THE PERIOD 1785-1821.

The period from 1785 to 1821 in the history of Ohio includes within its legislative enactments measures that compose a most interesting prelude to the legislative history of public instruction in the State. It was not until the latter year that the first common school law of Ohio was passed, while in the former year the Continental Congress passed the land ordinance in which originated the educational land-grant policy of the National Government. This ordinance decreed that the territory northwest of the Ohio River ceded by the individual States to the United States, which had also been purchased of the Indian inhabitants, be surveyed into townships 6 miles square, and that these townships should be subdivided into lots 1 mile square; it prescribed an order for numbering these latter sections, and declared that the lot numbered 16 in every township should be reserved for the maintenance of public schools within that township. These provisions were not applicable to all the lands that went to form, in 1802, the State of Ohio. In the northeast there was the region reserved by Connecticut out of her western claim, known as the Western Reserve. Southward, between the Scioto and Little Miami rivers, was the district that Virginia retained for the remuneration of her soldiers: and, touching this on the north and east, a section appropriated by the United States to the Revolutionary soldiers, who, under the legislation of Congress, were entitled to land bounties, called the United States Military District. Generally speaking, about 15,000 square miles of territory comprised in the 41,000 square miles did not come within the range of the legislation of 1785.

By the act of April 30, 1803, which authorized the people of Ohio to form a constitution and State government, Congress made the people the offer of section 16 in every township for the use of schools. The constitutional convention, in accepting this offer, added the condition that those parts of the State to which the existing legislation did not apply should enjoy equivalent advantages with the others, namely, that Congress should donate to the United States Military District one thirty-sixth part of the lands thereof for the support of schools; that it should similarly appropriate unlocated lands for the same purpose in the Virginia Military District; that it should make such provision as it found expedient for the inhabitants of the Western Reserve, and should donate for public school purposes one thirty-sixth part of lands purchased thereafter of the Indians. In reply to this Congress passed an act March 3, 1803, satisfying all parts of this request. But as it proved to be impracticable to execute the donation made to the Virginia Military District, an act was passed March 2, 1807, granting to that division of the State 18 quarter townships and 3 sections. Still further, the extinction of Indian titles so retarded an appropriation of school lands for the people of the Western Reserve, all of which lay beyond its limits, that it was not until 1834 that the donation to them finally amounted to one thirty-sixth part of the area of the Reserve.

Congress also made endowment for higher education at the beginning of her land legislation for the Northwest. The terms of the sale to the Ohio Company, made July 23, 1787, stipulated that land amounting to not more than two townships be given perpetually for the purpose of an university, to be laid off by the purchasers as near the center of the tract as might be, while the patent to John Cleves Symmes, September 30, 1794, declared that one complete township should be held in trust for the purpose of establishing within the area since known as the Symmes tract, lying within the two Miami rivers, an academy and other seminaries of learning.

The sum total of the lands dedicated to the purposes of education was about

1,100 or 1,200 square miles of the area of the State. The title to these lands Congress vested in the general assembly in trust for the uses specified, and no other uses, and a large part of the legislation which we have styled a prelude to our proper subject relates to laying off lots, improvements, leasing, sales, and providing administrators. The period of sales, however, did not begin until 1827.

The earliest law touching the subject was enacted by the Territorial legislature November 15, 1799, and provided:

If any person or persons shall, after the passage of this act, under pretence of any lease or otherwise, cut, fell, box, bore, or destroy any black walnut, black, white, yellow, or red oak, white wood, poplar, wild cherry, blue ash, yellow, or black locust, chestnut, coffee or sugar tree, or sapling, standing or growing upon any lands within the territory reserved, appropriated, or intended for the use and support of schools, * * * such person or persons shall forfeit and pay for every such tree or sapling so cut, felled, boxed, bored, or destroyed the sum of \$8.

If a tree or sapling of any kind, not herein enumerated, were injured, the fine was \$3. The values here placed upon the timber seemed to prove that the school lands would be exploited with an eye single to the interests of education; but time was to show that the promise would be rudely broken. The legislation of the general assembly on the subject of school lands was marked by great incompetency and unfaithfulness.¹

Before 1802 it had become common for the States to incorporate into their constitutions articles or clauses concerning education in schools. The practice was not universal, but Ohio, made up as her population was, was not likely to fall short in the matter. These are the educational clauses that the State set in her first fundamental law, so far as they relate to our subject.

ART. VIII. 3. * * * But religion, morality, and knowledge being essentially necessary to the good government and the happiness of mankind, schools and the means of instruction shall forever be encouraged by legislative provision, not inconsistent with the rights of conscience.

25. That no law shall be passed to prevent the poor in the several counties and townships within this State from an equal participation in the schools, academies, colleges, and universities within this State, which are endowed, in whole or in part, from the revenues arising from the donations made by the United States for the support of schools and colleges; and the doors of the said schools, academies, and universities shall be open for the reception of scholars, students, and teachers of every grade, without any distinction or preference whatever contrary to the intent for which the said donations were made.²

The character of that legislation of the period which pertains to education more directly may be inferred from the following titles: 1802, January 9, an act establishing a university in the town of Athens; 1805, February 21, an act incorporating the Dayton Library Society; 1803, April 16, an act to incorporate the trustees of the Erie Literary Society; 1803, February 15, an act incorporating the Dayton Academy; 1803, February 18, an act to incorporate the trustees of the Chillicothe Academy; 1809, February 7, an act to establish the Miami University.

¹ No small portion of these lands was occupied at an early day by persons who settled on them without any other title to them than mere occupancy gave them. These occupants made no valuable improvements on these lands, but they contrived in time to obtain various acts of our general assembly in favor of such squatters. Such acts increased in number every year until they not only had cost the State large sums of money for legislating about them, but some entire sessions were mostly spent in such unprofitable legislation. In the meantime scarcely a dollar was ever paid over to the people for whose benefit the lands had been given by Congress. Members of the legislature not unfrequently got acts passed and leases granted either to themselves, to their relatives, or to their warm partisans. One senator contrived to get by such acts 7 entire sections of land into either his own or his children's possession. (History of the State of Ohio, Natural and Civil. Caleb Atwater. Second edition. Cincinnati, 1838, p. 253.)

² Those parts of the eighth article of the constitution that relate to slavery, religion and schools, or education, were prepared and introduced into the convention by Judge Ephraim Cutler, one of the representatives of Washington County, and a son of Rev. Dr. Manassah Cutler. (Life and Times of Ephraim Cutler. Julia Perkins Cutler. Cincinnati, 1860, p. 77.)

An act of general application, to provide for the incorporation of schools and library companies, passed January 24, 1817, shows that there had come to be a good deal of private educational activity in the State. This act runs:

At any time when six or more persons shall have associated themselves together for the purpose of establishing a school and building a schoolhouse, or for the purpose of establishing a library, and shall have given themselves a name, it shall and may be lawful for such person. to obtain letters of incorporation, etc. * * * All existing associations for the establishment of schools and library companies may obtain letters of incorporation under this act.

It will be seen that, down to 1831, although the State constitution said that schools and the means of instruction should ever be encouraged by legislative provision, the State did absolutely nothing to carry out the provision, and instruction was wholly a voluntary matter.¹

The first public-school law passed by the general assembly, January 22, 1831, was entitled, "An act to provide for the regulation and support of common schools." It ordered that the trustees of the several townships in the State should submit to the people at the next township elections the question of organizing the respective townships into school districts. If the majority of the householders favored such organization the trustees should, within twenty days, lay off the township or any part of it into school districts, which should contain not less than twelve nor more than forty families each. Joint districts including parts of several townships might be laid off by the joint action of the different boards of trustees, in case the inhabitants of any neighborhood wished it. The township clerk should record each district laid off. The trustees were to have regard for all school companies incorporated under the act of 1817, or any other, by including all members of any such company within the same school district, and leaving their corporate rights undisturbed.

The remainder of the act relates to the school committee, the forerunner of the board of education. It provides that the householders in each school district shall meet annually on the first Monday in May, ten being a quorum, and elect three householders as a school committee for the district; also one person to be collector and treasurer; these officers to hold their appointment until their successors should be elected and qualified. The householders, assembled in district meetings, were also to vote upon the question of erecting a schoolhouse, a majority of two-thirds being necessary to carry it. The school committee were authorized to cause the erection of such schoolhouse in some convenient place in the district, and to purchase or receive by donation land for the purpose, not exceeding 2 acres, the title to be vested in the committee or their successors. The committee were made a taxing authority, with power to levy, upon all property situated within the district and belonging to residents thereof which was liable to taxation for State or county purposes, an amount not to exceed in any one year one-half of the amount that the law authorized for State or county purposes. Another important function of the school committee was the employment of a teacher or teachers. No provision was made for certificating these persons. The schools were to be kept open to all scholars of a suitable age within the district. The length of a term was to be such as the school committee judged to be for the interest of the district. Running expenses might be assessed quarterly by the committee on the parents or guardians of the scholars, in proportion to the number of scholars, it being left to the discretion of the committee, however, to remit assessments on persons unable to pay, and to make up any deficiency thus arising out of the fund raised by taxes. It was

¹ Before the introduction of a school system as defined in the laws * * * the existence of a school in any neighborhood depended solely upon the efforts of one or more individuals, who would take the trouble to raise by subscription money to employ a teacher, and either build a house or set apart a room in their own dwelling for that purpose. (Life and Times of Ephraim Cutler, p. 172.) Many schools were taught in private houses. (Ibid., pp. 49, 88.)

the duty of the district collector to collect both taxes and assessments. As treasurer he might be required by the school committee to give bonds. He was permitted to retain 2 per cent of the moneys received as his compensation; but all other school officers were forbidden to receive compensation for their services. The concluding section of the act provides:

In such townships as by law are entitled to public moneys from the rent of section number sixteen or other school land, the trustees of such township shall allow said school district its proportion of such money, to be ascertained and proportioned under such laws as may be enforced at the time application may be made regulating the application and division of such school fund, and the treasurers of the several school districts are hereby authorized to receive the same, for which they shall be accountable to said committee.¹

II. THE PERIOD 1821-1825.

The school law of 1821 was wholly inadequate to set going any vigorous common school movement because it was not mandatory but permissive, leaving the organization of schools entirely to the will of the householders of the township. It made possible a conflict of authorities. This brings us to notice the dual township system of Ohio, which has received large recognition in school legislation down to the present time.

The original surveyed townships are areas of land 6 miles square that were laid out in obedience to the Congressional land ordinance of 1785, and to other provisions for the same purpose, except in the Western Reserve and the United States Military District. Until 1806 these townships had only a geometrical existence. On the other hand, civil townships or, as the statutes of a certain period describe them, the organized townships, existed to meet the needs of local government. Such townships began to be organized as soon as the Territorial government in 1790 authorized the courts of quarter sessions to take such action, while the State law afterwards authorized boards of county commissioners to lay off townships. The source of confusion is that the areas of the two kinds of townships are not always identical, and that it was necessary to identify the school system for purposes of administration with the civil townships, while the educational land-grant policy of the United States gave the original surveyed townships a political status in the school system on its fiscal side. The township that had to do with the administration of schools was not necessarily the township that owned lot No. 16. In the early history of the State civil townships were large, often embracing many original surveyed townships. Laws passed in 1806 and 1810 provided for the organization of the original surveyed townships and fractional townships in which there were sections of land reserved by Congress for the use of public schools therein. As soon as any such township should number 20 qualified voters they were authorized to elect 3 trustees and 1 treasurer for the purpose of taking into their care the section above mentioned, who shall be a body politic, corporate, etc. Still further, the acts provided for the creation of school districts, viz, the trustees are hereby authorized, as soon as they may think necessary, to lay off said townships into proper divisions and the same to alter from time to time as they shall think proper for the purpose of establishing schools therein. The earlier of these two acts provided that the divisions thus laid off should share the profits arising from their reserved section according to the number of inhabitants; the later one, that the schools thus established should share according to

¹ Little is known concerning the enactment of this law. In 1819-20 Judge Ephraim Cutler, the author of the educational clauses of the constitution, a determined advocate of public education, procured the passage of a bill in the house of representatives by a vote of 40 to 20; but the bill failed in the senate. This bill appears to have been substantially the same one that became law two years later, if, indeed, it was not identically the same. (*Life and Times of Ephraim Cutler*, pp. 113, 115, 123, 123; *History of Ohio*, Caleb Atwater, p. 254.) Atwater says of the bill of 1819: This bill, after being much injured by amendments, passed the lower house of the legislature, but was either not passed by the senate or so modified as to render it useless,

the number of scholars and in proportion to the time they had been taught in the schools.

The school law of 1821 speaks in two places of the trustees of townships. It seems to have meant that the trustees of the civil township should organize school districts, which was in conflict with the act of 1810 that was still in force; but there is no doubt that the trustees who were ordered to pay over to the treasuries of the school districts the moneys arising from the rent of township school lands were the officers of original surveyed townships.

The school law of February 5, 1825, has been regarded as the true beginning of the organization of public schools in Ohio, because it was mandatory. The act of 1817 to provide for the incorporation of school and library companies had been repealed in 1824. The law of 1810 relating to original surveyed townships remained in force till 1829. The school law of 1825 makes it the duty of the trustees of each incorporated township, meaning civil township, to organize school districts. The law of 1821 had pointed out the mode of creating school districts, differentiated the school district officers, determined the general nature of their duties, defined their official relations to the civil community, and provided for conveying the income from township school lands into the school district treasuries. The new act retained these provisions for the most part and made important additions. It created a county school tax, which did not disappear till 1851, making it the duty of the county auditor to levy upon all the taxable property of the county half a mill upon the dollar to be appropriated for the use of common schools within the county. He was to enter into an account for this fund with the school districts, basing his apportionment upon an enumeration or list of householders. This act also made it necessary for teachers in the public schools to be examined and to hold certificates of qualification and of good moral character. The branches of study were reading, writing, and arithmetic. The county court of common pleas should appoint annually 3 examiners of common schools, who, in addition to examining candidates for certificates, were clothed with the function of visiting the schools that in many States is intrusted to a county superintendent. But the exercise of such power was only permissive and not mandatory. The district meeting was to provide fuel and the means of erecting a schoolhouse. To the payment of teachers the revenues arising from the school lands were to be applied; after these had been exhausted, the school directors were to refer the teacher to the county auditor, who should draw on the county treasurer not to exceed the amount due therefrom to the district in question. This act left the rate bill or fee bill in vigorous life as before.¹

¹ Certainly little and probably nothing came from the act of 1821. But now the matter of providing a system of common schools for the State was taken up with a good deal of earnestness, and we are, fortunately, in possession of material facts relating to the enactment of the law of 1825. In December, 1821, the house of representatives appointed a committee of 5 on schools and school lands. The chairman of this committee was Caleb Atwater, afterwards an historian of the State. The report of this committee, which was adopted by the two houses in January following, closed with a resolution authorizing the governor to appoint a commission of 7 members, whose duty it should be to collect, digest, and report to the next general assembly a system of education for common schools and also to take into consideration the state of the fund created by Congress for the support of such schools. Atwater was the chairman of this commission and Cutler was also a member. The commission prepared free pamphlets for general distribution, one showing the actual condition of the school lands, one containing the draft of law to be submitted to the assembly, and the third an explanation of the system proposed. These documents were freely circulated through the State in the year 1823, but the legislature was opposed to all action and nothing was done at the time. The sequel Mr. Atwater relates in this manner: "During the next summer and autumn the contest about the sale of the school lands, the school system, the canal, and an equitable mode of taxation was warm and animated, but the friends of all these measures triumphed over all opposition at the polls at the October election of 1824. Large majorities were elected in both houses friendly to these highly beneficial measures. These measures were carried through the general assembly, and the greatest revolution politically was effected that our history offers to the reader. That legislature was the ablest in point of talents and moral worth that we ever had in the State." (P. 262.)

III. THE PERIOD 1825-1838.

In 1827 the general assembly began to provide for the sale of the school lands, the leasing plan having failed. Three years earlier this body had addressed a memorial to Congress on the subject, which cites the original grants and the provisions of the State legislature relative to leasing the land and to the distribution of the rents. The memorial accounts for the failure of the leasing policy as follows:

By reason of the facilities which the State of Ohio affords for acquiring a property in real estate, a necessity exists of leasing the lands in question to persons almost wholly destitute of pecuniary means whereby the avails of those lands are rendered at least uncertain. * * * The great body of those who constitute the strength and basis of every government and who are to be considered as the friends of good order and public improvement are among those who are the owners as well as the occupiers of the soil.

As Congress made no reply to this memorial the legislature assumed that it already had the authority to sell the lands and accordingly passed a series of acts enabling the voters of the townships and districts that possessed lands in common to decide whether the lands should be put on sale, and other acts defining the method of procedure. This change of policy gave rise to "the common school fund" of Ohio. The original law relating to the subject was enacted January 30, 1827. It orders that—

All moneys paid into the State treasury arising from the sale of any land appropriated by Congress for the use of schools in any original surveyed township or other district of country within the State shall constitute an irreducible fund for the support of common schools within the township or district of country for which such land was originally appropriated.

The act pledges the faith of the State for the annual payment of interest upon this fund at 6 per cent. It made the auditor of the State the accountant for the fund and provided that he should open an account with every township and district of country for whose use the lands were appropriated, and ordered the interest to be paid over annually to the respective officers authorized by law to receive it. The act also vested in the common school fund any donation that should be made for common school education. It further created a fund to belong to the people of the State in common for the support of common schools, to consist of the proceeds of the sales of salt lands which Congress had given to the State. There were at the time in the State 819 townships and 3 school-land districts, namely, the Western Reserve, the United States military lands, and the Virginia Military District. By this legislation it will be seen the school system began to make use of the machinery of the State government. It had already become identified for certain purposes with the county and township. Henceforth the political organization of the original surveyed township tended to lose its importance, although the statutes of the State still authorize it to elect officers.

The act establishing the common school fund was superseded March 2, 1831, by another very much like it, which made the additional provision that the interest on the other fund belonging to all the people of the State in common, which should accrue from the sale of the salt lands, be funded until January 1, 1835, and thereafter be annually distributed to the several counties of the State, in proportion to the number of white male inhabitants above the age of 21 years. Similarity of subject makes it in order to notice in this place the fact that this incidental fund was increased in 1851, March 2, by the proceeds of the sales of the swamp lands, which had been granted to the State of Ohio by act of Congress, September 28, 1850. The interest on this money was to be funded until January 1, 1855. Thereafter it was to be distributed on the same basis as the interest of the salt lands fund. The legal status of the salt land and swamp land funds has at times been laid open to dispute by the indefinite attitude of the school law towards them. They are, as the law now stands, distinctly recognized as sources of common school revenue.

The interest on them has come to be distributed, like other school moneys, on the basis of the enumeration of school youth.

Between 1825 and 1838 there were four general school laws passed, their dates being February 10, 1829, March 10, 1831, February 28, 1834, and March 12, 1836. Each one of these laws was merely the combination of its predecessor, which it repeated in its essential features, with two or three minor amendments that had been enacted in the interval. In 1827 a supplementary school act provided that each householder whose school-district tax would amount to less than \$1 by the regular levy should be assessed \$1, which might be commuted to two days' labor on the schoolhouse. A similar provision for commuting the local school tax remains in the legislation of the State until 1838. The act of 1827 contained also the provision that all fines imposed and collected by any justice of the peace for any offense or immoral conduct done or committed in any school district should be by such justice paid over to the treasurer of such district for the use and support of schools within the same. This provision does not appear in the school laws proper later than 1829, but it comes to be reiterated in great detail in the penal law.

With the act of February 10, 1829, begins a significant discrimination, which was continued until the negro race was finally put upon a new civil footing. It is to the effect that nothing in the act shall be so construed as to permit black or mulatto persons to attend the schools hereby established, or to compel them to pay any tax for the support of such schools. The rate of the county tax is increased to three-fourths of a mill on the dollar, and more detailed provisions are made for the district-school meetings than before.

The regulations that hedge about the assessment of schoolhouse taxes through this period are almost amusing in their seemingly petty complexity and bespeak considerable unpopularity for these school-district levies. To vote these taxes the quorum required at the district meeting is larger than for other business; the vote must have a larger majority; the maximum tax varies, being at one period graduated to the amount of taxable property belonging to residents of the district. The minimum amount to be assessed on any taxable person ranges from \$1 to 25 cents. There are provisions for commuting this tax into labor or schoolhouse materials. Lands situated more than 3 miles from the site of the schoolhouse are exempted from taxation. Districts are to share the rents accruing from the school lands in proportion to the number of families. The gradation of teachers' certificates begins, their time being limited to one year from date. The minimum period for which schools may be kept open any year is three months. Voluntary subscription or assessment upon parents and guardians is to be resorted to if the funds applicable to paying teachers are inadequate. Those who have studied the actual working of these early laws tell us that the attendance fell off as soon as the public moneys were spent. We find no provision of law for commuting any part of the teachers' compensation into boarding and lodging from house to house, but custom tended to establish and perpetuate that practice. School districts were not to be altered unless the trustees should make public their intention to do so. Joint districts are authorized, even when the townships interested therein are situated in different counties. By the law of March 10, 1831, school directors are constituted a body politic and corporate. A very important new feature of the same law is the distribution of school funds in proportion to the number of children in the districts. This necessitates provision for an enumeration of children; hitherto there had been only an enumeration of householders. In its earliest form this provision reads:

The clerk of each school district shall annually in the month of November take a list or enumeration, in writing, of all the white youth in his district between the ages of 4 and 21 years, not including any who are married, and shall return the same to the auditor of his county. * * * If any school district shall be

partly situated in an original surveyed township or fractional township to which belongs any section 16, * * * granted by Congress for the use of schools in such township, or to which belongs any interest arising from the money for which such land has been sold, the clerk of such district shall, in taking the annual enumeration of youth therein, * * * enumerate separately those residing in that part of the district situated in such original surveyed township or fraction of township; * * * and where any district comprises a portion of two or more civil townships, the clerk shall specify in his enumeration of the youth the township in which they severally reside.

The scheme of apportionment now established is described as follows:

That the auditor of each county shall * * * apportion to the several school districts in such county all the money in the treasury of such county for the use of schools, therein, as follows, to wit: All the money collected on the tax duplicate of any township for the use of schools shall be apportioned to the several districts and parts of districts in such township; all the money received from the State treasury on account of interest on the money accruing from the sale of section 16, or other land in lieu thereof, shall be apportioned to the several districts and parts of districts in the original surveyed township or fraction of township to which such land belongs; all moneys received by the county treasurer from the State treasury on account of the Virginia Military School fund shall be apportioned to the several school districts and parts of districts within the county lying within the Virginia military district; all other money for the use of schools in the county shall, if its appropriation is not otherwise directed by law, be apportioned to all districts in the county; and all such apportionments shall be made to the several districts and parts of districts in proportion to the number of youth therein as returned by the district clerks in November next preceding.

The law of 1831 declares that no certificates of qualification shall be issued to any teacher unless he or she be found qualified to teach reading, writing, and arithmetic; but a later amendment to this section provided that whenever the inhabitants of any school district should be desirous of employing a female teacher for instructing children in spelling, reading, and writing only, and the directors thereof should signify the same in writing to the school examiners, it should be lawful in such case for the examiners to give such teacher a special certificate. Although women did not yet enjoy their rights with respect to school administration, they seem to have been compensated, as the phrase goes, by privileges. The school law of 1834 makes it the duty of the county board of school examiners in each county to appoint one school examiner to each township in their respective counties to examine female teachers only; but the section quoted adds that these examiners in granting certificates shall be governed by the same rules and regulations as the county board, and the exemption from the examination in arithmetic is not continued.

The acts of 1833-34 suggest some of the practical difficulties attending the collection of school taxes payable in goods. The former provides that when the inhabitants of any school district shall neglect or refuse to furnish sufficient fuel for such school, it shall be lawful for the directors to apply such sum out of the treasury of said district in the purchase of such fuel as may be necessary to obtain the same. However, the pioneer custom was not readily abandoned; for the next act declared, that it should be the duty of every person sending a child to any district school to provide his just proportion of fuel for the use of such school to be determined by the directors in proportion to the number of children sent. It adds that if any person liable to make the contribution of fuel failed to provide it after due notice and warning, the director shall furnish the fuel and charge the same to such person. The amendment of February 13, 1833, contains the first reference to the school term; it declares it lawful for school directors to apportion the school funds applicable to the payment of the teacher to the different terms or divisions of the school year.

The law of March 12, 1836, included little that was new. The rate of the school tax assessed upon the counties had been steadily increasing. At this time the maximum was fixed at $1\frac{1}{2}$ mills on the dollar, and county commissioners were

authorized to allow an additional half mill. In case they refused it was made lawful for any township in the county to have an additional mill and a half assessed upon itself. County auditors were, for the first time, required to report the enumeration of school children for their respective counties to the auditor of State. This was to become a matter of greatest importance, as the basis of apportionment for such school funds as should belong to the people of the State in common.

The general assembly took its first serious step toward superintendence in a law enacted March 27, 1837, to create the State office of superintendent of common schools.¹ The incumbent of this office was to be elected for the term of one year by the joint resolution of the two houses of the legislature. He was to be commissioned by the governor, take an oath for the faithful performance of his duties, and receive the compensation of \$500 a year. His duties had to do largely with statistics. He was to report to the general assembly the following matters: Number of districts in each township in each county; the number of white youth between the ages of 4 and 21 years, specifying the number of each sex; the number attending school every year; the average time of attendance; the time the schools were in session; distinguishing the time they were supported by the proceeds of the irreducible funds, the time supported by taxation and the time supported by voluntary subscription; the amount paid to teachers in each district, township and county, and from what sources derived; the amount paid for buildings, for repairs, distinguishing the amount received from taxation from voluntary contributions. It was also made his duty to report upon the condition of the several school funds and upon the operation and defects of the common school system, and to suggest plans for its better regulation and improvement. The law authorized circulars of inquiry to be addressed to county auditors and to local directors and made it their duty to assist the superintendent in securing information. This last clause, as carried out by Hon. Samuel Lewis, the first and only incumbent of the office, meant a great deal. It was his effort, largely, if not mainly, that secured the enactment of the great school law of March 7, 1838.² There was a great awakening of interest in common schools throughout the State as

¹ The office of superintendent of common schools is one of the results of the exertions of the College of Professional Teachers and Western Literary Institute, established in Cincinnati, seven years ago. It has continued to grow in talent and numbers, and is now extending its vast and benign influence in the cause of education throughout the West and South.

At the instance of Albert Pickett, senior president of the institution, the Ohio directory, consisting of Elijah Slack, William H. McGuffey, M. G. Williams, A. Kinmont, B. P. Aydelott, and C. E. Stowe, nominated adequate persons to represent the objects of the College of teachers before the legislature of the State. The persons named for that purpose were Samuel Lewis, Calvin E. Stowe, William H. McGuffey, Edward D. Mansfield; men of acknowledged talents, and who performed their duties with great zeal and ability. Their powerful appeal to the legislature in behalf of education induced legislative action and led to the establishment of a superintending officer. Samuel Lewis, esq., was selected, and we know of no one from whom the State may expect more untiring zeal in the faithful discharge of his official duties than from the object of their choice. (*The Western Academician and Journal of Education and Science*, Edited by John W. Pickett, A. M., Cincinnati, published by James R. Allbach, 1837-38, pp. 381-382.)

² Comparison of the provisions of the school act of March 7, 1838, with the recommendations of the first annual report of Superintendent Lewis shows that he fully deserved the honor of having that great law called by his name. The history of the enactment of this law has been summed up thus: His report was favorably received by the people, and its suggestions were commended by leading newspapers. W. B. Van Hook was chairman of the school committee of the house of representatives. Accepting Mr. Lewis's views as those of a wise and well-informed man, he reported to the committee a bill embodying nearly all of his recommendations. That bill was introduced to the house on the 5th of February, 1838. It was discussed with earnestness, and bitterly opposed; but, on the 17th of February, passed by a vote of 46 yeas to 20 nays. After slight amendment, it passed the senate on the 3d of March by a vote of 21 yeas to 13 nays. The house concurred in the senate amendments, and on the 7th of April, 1838, the law was in force. (*System of Common Schools in Ohio*, William T. Coggeshall, published in *American Journal of Education*, Vol. VI, p. 87.) The 3d of March seems to be an error for the 7th of March.

the appointment of Prof. Calvin E. Stowe as a State commissioner to report on the schools of Europe and the publication of his report indicates. A resolution adopted in January, 1838, directs that 8,500 copies of Professor Stowe's report on elementary public instruction in Europe be printed and deposited in the office of the secretary of state, subject to the future disposition of the legislature; also that 1,000 copies be printed for the use of members of the general assembly, 300 for the author of the report, and 200 for the superintendent of common schools.

The keynote of the Lewis Act is supervision. Interwoven with the scheme to establish local superintendence is an attempt to centralize school administration by preferring township officers to district officers. Probably there was no conscious approach to the township district system, although the new legislation suggests that system. Moreover, there was a partial return to the old status of the district officers between this date and 1853. By the act of 1838, every township clerk was made superintendent of common schools within his township, his duties including visiting all the schools annually, inspecting the teachers' records, observing the management and making suggestions to teachers, filling casual vacancies in boards of directors, assuming directors' functions himself when boards failed to serve, and taking the enumeration of school children, a task which had hitherto devolved upon the district clerk since 1831. The minimum school year being fixed at six months, the township superintendent was directed to estimate the amount of money needed beyond what was available from other sources to carry on the schools, and submit to the voters at the annual township election the question of raising the same by tax. The next year there was supplied the provision to return to voluntary subscription or special assessment upon parents and guardians in case the tax was not voted. Another step toward identifying the district with the township was intrusting the township treasurer with the handling of all school funds distributed from the State treasury and accruing from the county and township taxes, leaving to the district treasurers only the collection of the district tax for buildings, fuel, furniture, etc.

The powers and duties of directors as newly defined point to the laying aside of some of the narrow district ideas and practices. Directors are authorized to levy a tax for incidental expenses not exceeding \$20 a year without the sanction of a district meeting. The old limitation upon the district tax growing out of the nonresidence of the property holders disappears. Not only householders but all voters have a place in the district meeting. The needs of schoolhouses in the way of furniture and other appointments begin to be recognized. More important than these things, there is an enlarged conception of school organization and of what a common school education ought to include. Directors are authorized to determine at what ages children may attend the different schools and during what terms; also what number shall be assigned to each teacher giving to all in the district an equal privilege. They may determine the studies to be pursued so that the three R's shall all be taught in the English language, and they may permit the teaching of other languages. Most significant of all is the provision that cities, incorporated towns, or boroughs shall constitute separate school districts wherein the electors shall choose either 3 directors from the district at large, or 1 from each subdistrict. Directors may divide such districts into subdistricts and may establish schools of different grades and ordain such rules for their management and discipline as they may think conducive to their good. There was a corresponding provision for special taxes.

It must not be supposed however, that this was the earliest response of the legislature to the educational needs of populous communities in the way of graded schools, for special laws authorizing such schools had already been enacted for Cincinnati and Zanesville. In Cleveland, however, the promoters of the early high school defended that institution against unwilling taxpayers by citing this provision of the general law. The visiting and advisory functions of the exami-

nners of teachers now disappeared before the more systematic provisions in relation to superintendence. A new function, however, given to these bodies, is prophetic of one of the liveliest chapters in school history—that is, school examiners are given authority to recommend text-books to school directors. The county auditor is styled the county superintendent of schools, his school duties pertaining entirely, however, to accounts and statistics. In addition to the enumeration of the school youth the reports deposited with him and transmitted to the State superintendent were to include a school directors' report showing the number of schools; the number of teachers, male and female, wages paid to each; length of school session in each district; number of pupils enrolled, male and female; average daily attendance; houses built and cost of each; value in quantity of school lands in or belonging to the township, and its annual rent; and such other information as might be called important. The teacher's report was now required to be more elaborate than before, and it was made unlawful for teachers to receive more than two-thirds of their compensation until their reports had been placed in the hands of the township clerk.

§ State superintendence was the leading feature of the act of 1838. The act of the preceding year relating to the subject was substantially incorporated in it, while additions were made. The term of office was lengthened to three years and the salary increased to \$1,200 a year. The duties of the office included the editing of a periodical named the Ohio School Director, which was to be published for one year at the State capital.

§ An important new principle appears among the fiscal clauses of the act, viz: The practice is established of appropriating State funds or property to public school uses. The "State common school fund" is created. This must not be confounded with the "common school fund" that was created in 1829, and was more permanently regulated in 1831. The State common school fund, as constituted by the Lewis Act, included interest on the surplus revenue at 5 per cent; the proceeds of the salt lands; the State revenue from banks, insurance, and bridge companies; and other funds appropriated, sufficient to make the sum annually distributed equal to \$200,000.¹

§ Twelve days after the passage of the Lewis Act a law was enacted to levy the first State school tax. It declared that there shall be levied annually for the State common school fund a tax of half a mill on the dollar of the valuation of all property entered for taxation on the general list throughout the State.

IV. THE PERIOD 1838-1853.

The great act of 1838 was too generous to the schools; it was not suffered to stand in its entirety. An amendment passed the next year authorizes county commissioners to reduce the rate of the county school tax to 1 mill on the dollar; the limit had been raised to 2 mills by the preceding act. Narrower limits were also set to the local school taxes. Neither was the public ready for Superintendent Lewis's conception of superintendence and local centralization. So the township superintendent is excused from the performance of some of the duties most characteristic of his office. Still more, in 1840, when Mr. Lewis resigned the State superintendency, the general assembly abolished the office and imposed some of its duties upon the secretary of state. There are indications at this time of strife between the English-speaking and the German elements of the population over the question of language. The clause in the law requiring that reading, writing, and arithmetic be taught in the English language is repealed.

¹ The "surplus revenue" mentioned was the portion of the surplus revenue of the National Government that was deposited in the custody of the State by direction of an act of Congress passed in 1837. This fund is more commonly referred to as the "United States Deposit Fund." The total amount that fell to Ohio was \$2,077,260.34. (*The History of the Surplus Revenue of 1837, etc.*, by Edward G. Bourne, 1885, p. 142.)

German district schools are recognized. German children residing in districts where the teaching is done in English are permitted to attend in other districts and to draw at the same time their share of the public money. Night schools are first authorized at about this period. The provision of 1839 provides that in town and city districts evening schools may be carried on for the benefit of male youths over 12 years of age who are prevented by their daily vocations from attending day schools. In 1842 the school district clerk had his former functions relating to the school enumeration restored to him. The district also enjoyed new dignity in the lengthening of the directors' term of office to three years, the order of election being so arranged that one director should be chosen and one should retire annually. It was now eleven years previous to the time when the township should supersede subdistricts and the subdirectors lose their corporate character. In 1847 the rate of the county tax was reduced to two-fifths of a mill in consequence of the increased value that the tax law of 1846 had given to the general list of taxable property.

It is in order to consider at this point the extraordinary development of city and town school organization that set in at the middle of the century. A phrase in the common-school law of 1839 had suggested that populous communities ought to be for school purposes a thing apart from the township. On February 12 of that same year the legislature passed the first special city school law. Its title was: "An act in addition to the act entitled an act to incorporate and establish the city of Cincinnati." It made the city council the responsible authority for maintaining schools, clothed it with power to tax, vested in it all titles to school property, and imposed all the necessary fiscal duties and some administrative ones. It was not until 1873 that the connection between boards of education and municipal legislatures was dissolved in great city districts. The act of 1839 created a board of trustees and visitors, which should consist of one member from each ward, elected by the voters. This body was vested with the appointing and organizing powers, and was responsible in financial matters to the city council. A third authority was the "board of examiners and inspectors," whose members were the appointees of the board of trustees and visitors, to which they reported regularly concerning the instruction given and the government of the schools. Examining teachers was one of their important functions. The law called for brick or stone schoolhouses, two stories high, and empowered the city council to borrow money to build them, but it did not grant any large powers in the way of extending the range of instruction. As has already been noticed, the general school law of 1838 made every city, incorporated town, and borough a separate school district and sanctioned graded schools. In 1839 a special law was enacted for Zanesville; in 1845, one for Columbus; and in 1848, one for Cleveland. In 1846 there was a supplement to the Cincinnati law which was also made applicable to the schools of Dayton. It declared:

1. The trustees and visitors of common schools of the city of Cincinnati, with the consent of the city council, * * * shall have power to establish and maintain, out of any funds under the control of said trustees and visitors, such other grade of schools, than those already established, as may to them seem necessary and expedient for the above-named purpose; and they are hereby authorized to have taught therein such other studies in addition to those now taught in the common schools of said city, under such regulations as said trustees and visitors may from time to time describe: *Provided*, That said funds shall not be appropriated toward the establishment and maintenance of such other grade of schools so as in anywise to impair the efficiency and permanency of the common-school system now existing in said city.

The power conferred upon the trustees and visitors of the common schools of the city of Cincinnati in the first section of this act is hereby conferred upon the managers of the common schools of the city of Dayton.

In 1850 was passed an act to authorize the appointment of a superintendent of common schools for Cincinnati. It provided that the qualified voters of Cincin-

nati should elect annually in April one superintendent of common schools for the city. The duties of this officer were to visit all the common schools in the city and establish under the direction of the board of trustees and visitors a course of study; also to make rules and regulations to promote the progress of the schools. The board of trustees was to fix the amount of the superintendent's compensation and had the power to remove him from office on good cause shown.

In this connection it is well to observe that the office of superintendent originated in the specialization of administrative and not of teaching functions. Therefore, to vest in it, power to appoint or at least to nominate teachers, is entirely congruous to the nature of the office.

Cincinnati, Zanesville, Columbus, Dayton, and Cleveland had entered upon the organization of graded schools earlier than 1847. But the really great impetus in this direction in the State was given by the so-called Akron law, which was passed February 8, 1847. It applied at first only to Akron and Dayton, but a supplementary act extended its provision to all cities and incorporated towns, two-thirds of whose inhabitants should petition the town council for its adoption. On February 21, 1849, a similar act was passed for the better regulation of the public schools in the cities, towns, etc. This might be adopted by any incorporated city, town, or village, containing 200 or more inhabitants not governed as to schools by any special law, upon the vote of the qualified electors. Both of these laws provided for the election of 6 school directors in the town, arranging the election so that 2 should be chosen annually for a term of three years. This board of education was constituted a body politic and corporate in law. The members were required to organize by choosing from their own number a president, a secretary and a treasurer, and to hold regular meetings. The Akron law vested the title to school property in the town council together with power to sell, lease, and convey such property with the advice of the board of education. It also made the council the taxing authority for school purposes, requiring the board of education to furnish an estimate of the amount of money needed. The next year the rate of this tax was limited to 4 mills. Such functions as determining building sites, erecting schoolhouses, and dividing the school year into terms were assigned to the board of education and not to the council as they had been by the Cincinnati law. The act of 1849 for cities and towns seems to have given the municipal council no place at all in the system. The board of education was made the taxing authority, but it had to submit the question to the people and the rate of tax was limited to 4 mills. A statement of finances and certain other matters had to be made public at each annual election. Moreover, the board of education was given power to borrow money for the erection of schoolhouses upon the favorable vote of the electors of the district. An act supplementary to the Akron law passed at this time made it possible for districts organized under it to exercise this power also.

But the most important feature of these two laws is the range of instruction which they contemplated. The Akron law provided that the board of education should establish in different parts of the town corporate of Akron, so soon as they should realize sufficient funds, six or more primary schools in which the rudiments of an English education should be taught; also, that it should establish a central grammar school where instruction should be given in the various branches and parts of study not provided for in the primary school and yet requisite to a respectable English education. The law of 1849 said on this subject:

It shall be the duty of said board, as soon as the means for that purpose can be provided, to establish in said district an adequate number of primary schools, to be so located as best to accommodate the inhabitants thereof, and in which the rudiments of education shall be taught; and it shall be the further duty of said board to establish in said district a suitable number of other schools of a higher grade or grades, wherein instruction shall be given in such studies as may not be provided for in the primary schools, the number of schools and also of the differ-

ent grades thereof to be determined by said board; and it shall be the further duty of said board to decide what branches shall be taught in each and all of said schools, provided that no other language than the English or the German shall be taught therein, except with the concurrence of two-thirds of said board.

The act of February 21, 1849, for the better regulation of the public schools in cities, towns, etc., was amended on March 13 of the next year so as to give union school privileges to smaller communities. The amendment declares that "the act * * * is hereby extended to incorporated townships and to school districts * * * which shall adopt the same in the manner specified." It provides, however, that said act shall not be so extended to any township or school district containing less than 500 inhabitants, unless said school district consists in whole or in part of an incorporated town or village.

The act of February 21, 1849, shares with the Akron law the honor of being the effectual charter of graded schools in Ohio.¹ Both were repealed, together with numerous other special acts, by the school legislation of 1873, when town and city districts were systematically classified and a greater degree of uniformity was secured. This mass of legislation for cities and towns brought with it the regulation of some matters that had never been specifically provided for in the common school laws. The relations between teachers and pupils began to receive attention. Suspension and expulsion, inflicted with proper deliberation, were prescribed for the more serious evils that had been left by tacit understanding to the rod and ferule. A larger publicity came to be required of boards of education. Much visiting of schools was required of school trustees and teachers' examiners. There are provisions in two or three special laws, including the Cincinnati act, for a public examination of pupils by these visitors. The city council of Cincinnati by the law of 1829 was authorized to spend \$100 a year for premiums to pupils.

Within the six years next preceding the passage of the great act of 1853, a series of brief statutes² were enacted which added entirely new features to the body of State school legislation. Some of these were repealed as separate laws and incorporated in the act of 1853; one or two were abandoned. February 28, 1846, is the date of an act authorizing school districts to establish libraries for the use of common schools. All legally constituted school districts were hereby authorized to expend for books and apparatus moneys not to exceed \$30 the first year and \$10 any subsequent year. These funds were to be raised and handled in the same

¹ About 70 of the towns and cities of the State established free graded schools, and of these more than 50 have been organized within the past three years and by the adoption of the law of 1849, for the better regulation of public schools in cities, towns, etc. (Report of Lorin Andrews, general agent of the State Teachers' Association, published in Annual Report of Secretary of State on Common Schools for the year 1851.)

² During the period 1840 to 1853 the secretary of state reported annually to the general assembly concerning the condition of the common schools. Indeed one or two of these gentlemen performed the duties that had been superimposed upon the more appropriate functions of their office better than could have been reasonably expected. Nevertheless the first years of the interval were marked by retrogression. For the quickened educational activity of the years 1847-1853, the highest credit is due to the Ohio teachers' association. Organized December 31, 1847, through the private initiative of the leading schoolmasters of the State, this society discharged, up to the time when the office of State superintendent of common schools was restored, functions that appertained more suitably to the State government. It sustained in the field a general agent who did much to prepare the public to demand and support the progressive measures that were to come; it kept in close touch with the secretary of state and saw its resolutions incorporated into his school reports. A parallel might be drawn between the State teachers' association, as a force in educational progress at this juncture, and the College of Professional Teachers and Western Literary Institute at a similar time in the preceding decade. The following statement was made in 1859: Recommendations of the Ohio teachers' association have been embodied in laws for teachers' institutes, for school libraries, for high schools, for township boards of education, for a State instead of a county tax, and for a state commissioner. (System of Common Schools in Ohio, William T. Coggeshall; published in American Journal of Education, Vol. VI, p. 552.)

manner as district taxes. School directors were to make rules for the use of such books and apparatus. The school law of 1853 was to make a great advance upon this. It ordered a State tax of one-tenth of a mill, to be levied for the purpose of furnishing school libraries and apparatus to all the common schools within the State.

On February 3, 1847, the first act relating to teachers' institutes was passed. It has an instructive preamble, which runs:

Whereas it is represented that in several counties associations of teachers of common schools, called teachers' institutes, have been formed for the purpose of mutual improvement and advancement in their profession, which, it is represented, have already accomplished much to elevate the standard of common school instruction in their respective counties; therefore, in order to encourage such associations and thus promote the cause of popular education, be it enacted, etc.

This law provides for the support of institutes by authorizing county commissioners to apply to the purpose part of the annual proceeds of that portion of the surplus revenue which had been deposited with the counties pursuant to an act of March 28, 1837. Funds thus appropriated were to be disbursed by the county board of examiners; at least one-half was to be expended to employ instructors and lecturers, and the balance for a suitable common school library for the use of the association. The privileges of every institute were to be free to all common school teachers of the county and to all persons within the county who intended to become common school teachers within twelve months.

On February 23, 1847, was passed an act to provide for the appointment of county superintendents of common schools in certain counties, which were named, twenty-five in number. The superintendents were to be elected by the clerks of the school districts in the county. They were to be ex officio chairmen of the boards of school examiners and were to sign all certificates issued; they had power to renew certificates at their discretion, also to annul them for cause, with the concurrence of one other member of the board. They had large duties as visitors and inspectors of the county schools, and were also to encourage teachers' institutes and educational societies, and to labor to stir up popular interest in education. Township superintendents were to report to them and they were to report to the secretary of state. The act was afterwards made general, but only one county availed itself of this privilege, and it was repealed in 1853. The county in Ohio has never become an established unit or district for school superintendence, as it has in nearly all of the Western States.

The most interesting of the new features of this period appears in the act of February 24, 1848, to provide for the establishment of common schools for the education of the children of black and mulatto persons. Since the act of 1829 declared itself nonapplicable to such persons, the school law had ignored them wholly, except to protect their property against taxation for school purposes. The new act ordered taxes to be collected on such property for the support of colored schools. It declared every city, town, village, and township in which there were at least twenty black or colored children of any age desirous of attending school, to be a school district for such children; and it made it lawful for the colored persons residing in such district to assemble and organize themselves, to appoint school directors of their own number, to erect and repair a schoolhouse, to procure suitable teachers, and to assume for such purposes the same powers as were possessed by white persons under the act of 1838. Any colored district that contained 50 or more scholars might be divided by its directors, provided no district was made that contained fewer than 20 scholars. The law permitted mixed schools, providing that in every community containing less than 20 black or colored children desirous of attending school, it should be the duty of the directors of the schools organized for white children to admit the blacks upon the same terms as the whites, provided no written objections were filed with the directors, signed by any person having a child in such

school, or by any legal voter of such district. The law contained nothing to indicate whether such schools were already permitted to any extent by the public sentiment of the community. In cases where the white inhabitants would not tolerate mixed schools and the number of colored children did not warrant the establishment of a colored school, the property of the blacks was exempted from school taxes. The following provision is of interest:

When schools for blacks shall have been organized * * * the children of such schools shall be enumerated and have the exclusive benefit of any donation or grant of land which shall be made by any person or persons or by Congress for the support of such schools, which shall be vested in the legislature of this State and appropriated to such schools only.

In 1853 colored children were included in the general district enumeration, only they were to be distinguished from the white children. By this time colored children seem to have become sharers in the great school funds of the State. The act of February 10, 1849, which repealed that of the preceding year, may be interpreted to indicate a larger tolerance of mixed schools. It left the establishment of dual districts for white and colored children to the discretion of boards of education. It provided that such trustees and directors or other officers having authority in the premises of each city and incorporated town or village should be authorized and required, respectively, in case they should not deem it expedient to admit the colored children resident in such township, city, town, or village, into the regular common schools therein established, to create one or more school districts for colored persons in every such township, city, town, or village, which district or districts should include all the territories thereof. Both laws provided that the school taxes on the property of the colored population in mixed districts should be added to the common district fund.

On January 21, 1848, an act was passed to secure the returns of the statistics of the common schools. This declared it to be the duty of the teacher, on presenting to the township treasurer an order for the payment of services, to accompany the same with an abstract of his daily record. It further declared it unlawful for any township treasurer to pay and redeem any order to a teacher unless the same should be accompanied by the abstract required. It made it the duty of the township treasurer to return such abstracts to the county auditor in making his annual settlement, and declared it illegal for the auditor to give credit to the treasurer for any order that had been unlawfully redeemed. It made it the duty of the several county auditors to carefully examine the abstracts and statements of teachers thus returned to them, and in their annual reports to the secretary of state to give such a tabular statement thereof as the said officer should require. There is abundant evidence that the evil of defective returns from the public schools was not eradicated by this legislation, for it was in 1858 that all the counties made for the first time a report of their school affairs.¹ An amendment to the Lewis Act that was passed March 12, 1849, ordered that English grammar and geography should be taught in any school upon the requirement of three or more of the householders interested. These two subjects were also added to the list of those in which candidates for teachers' certificates were required to be examined. This was the first mandatory advance beyond the three R's.

In 1850, March 22, a law was enacted for the appointment of a State board of public instruction. This was an attempt to put in commission the department of State educational supervision. It created a board of five citizens to be appointed by joint ballot of the two houses of the general assembly, one annually for a term of five years. The senior member was to be styled the State superintendent of

¹Fifth Annual Report of the Commissioner of Common Schools, Columbus, 1859, p. 3.

common schools; the others, district superintendents. To the head of this board were assigned all the duties that had attached to the former office of superintendent of common schools except the inspection of schools; the other members were to attend to this duty, each in the quarter of the State assigned to him. The district superintendents also had duties in connection with county boards of examiners. One of these was to furnish for the semiannual examination of teachers lists of questions which the State superintendent had prepared. This included the earliest provision for uniform examination questions. A fee of \$1 was imposed upon every applicant for examination, the first instance of the kind in any general law in the State; and the fund thus accruing was to be applied to the support of the State board. One clause of the act put rare faith in the impartiality of man; it authorized the State board to issue life certificates to applicants who were recommended by their proper boards of county examiners and by their district superintendents. But the law was enacted too late in the session to permit the appointments to be made, and seems never to have gone into operation.

On March 24, 1851, an act was passed bearing the cumbersome title "An act providing for school districts and school-district meetings, prescribing the duties of district officers, and clerks and treasurers of townships, and increasing the State and county common-school funds." This act restores the law of 1838 in many respects to its original substance and vigor. That act had made an approach to the township district system established later, by the act of 1853, by devolving important school duties upon both the township treasurer and township clerk. A series of amendments had subtracted from the powers of these officers in favor of the district treasurer and district clerk. The act of 1851 fully rehabilitated the township clerk in the capacity of township superintendent of schools, allowing him, moreover, \$1 a day for time spent in visiting schools. It renews the distinction between district taxes levied for building, repairs, fuel, etc., and the special tax to make the school session six months long. It assigns the collection of the former to the district treasurer; the latter it views as a township rather than a district tax and limits it to 3 mills on the dollar. On the other hand, this law stops short of the enactment of 1853 in that it makes very much of district directors and of the annual district meetings. It increases the amount that the directors may levy without the sanction of a school meeting to \$50; it makes the rate of the county tax 1 mill on the dollar, which had been put as low as two-fifths of a mill in consequence of the tax law of 1846, and it orders that the State common-school fund be so increased that the amount yielded for annual distribution shall equal \$300,000.

The second constitution of Ohio, which took effect in 1851, assigned to education a stronger position than that of 1803 had done. The bill of rights contained the following declaration:

Religion, morality, and knowledge, however, being essential to good government, it shall be the duty of the general assembly to pass suitable laws to protect every religious denomination in the peaceful enjoyment of its own mode of public worship, and to encourage schools and means of instruction.

The educational article runs as follows:

ARTICLE VI.—*Education.*

SEC. 1. The principal of all funds arising from the sale or other disposition of lands or other property granted or intrusted to this State for educational and religious purposes shall forever be preserved inviolate and undiminished; and the income arising therefrom shall be faithfully applied to the specific objects of the original grants or appropriations.

SEC. 2. The general assembly shall make such provisions, by taxation or otherwise, as, with the interest arising from the school trust fund, will secure a thorough and efficient system of common schools throughout the State; but no

religious or other sect or sects shall ever have any exclusive right to or control of any part of the school funds of this State.¹

The great principle of free common-school education was put into operation under the school law of March 14, 1853, which left the rate or fee bill to be a thing

¹Information at first hand regarding the framing of these clauses is given by James W. Taylor, as follows: Early in the session of the Ohio constitutional convention, which assembled in Columbus May 6, 1850, and closed its deliberations, after an adjournment to Cincinnati, on the 10th of March, 1851, the subject of education was intrusted to a standing committee, composed of the following delegates: Harmon Stiger, of Stark; Otway Curry, of Union; Samuel Quigley, of Columbiana; James W. Taylor, of Erie; Jacob J. Green, of Defiance; A. G. Brown, of Athens, and John A. Smith, of Highland. On the 5th of July (the fiftieth day of the Columbus session) the following report was presented from the standing committee upon education.

SECTION 1. The general assembly shall provide for the election, by the people, of a superintendent of common schools, whose term of office, duties, and compensation shall be prescribed by law, and shall provide for the election or appointment of such assistants or other officers as may be found necessary, prescribe their duty, term of office, and compensation.

SEC. 2. The general assembly shall encourage, by suitable means, the promotion of moral, intellectual, scientific, and agricultural improvement.

The proceeds of the sale of lands that have been or may hereafter be granted by the United States for educational purposes, and all lands or other property given by individuals for like purposes, together with the surplus revenue deposited with this State by the United States (until reclaimed), shall be and forever remain a permanent, irreducible fund; the interest and income therefrom shall be faithfully applied to the specific objects of the original grant, gift, or appropriation.

SEC. 3. The general assembly shall make such provision, by taxation and other means (in addition to the income arising from the irreducible fund), as will secure a thorough and efficient system of common schools, free to all the children in the State.

Mr. Curry submitted the following minority report:

SEC. 1. Religion, morality, and knowledge being essentially necessary to good government and the happiness of mankind, schools and the means of instruction shall forever be encouraged by legislative provision not inconsistent with the rights of conscience.

SEC. 2. It shall be the duty of the general assembly to provide by law that the principal of all funds arising from the sale of lands heretofore or hereafter granted or donated, from any quarter, for educational purposes, together with the principal which may be realized from donations of personal property and money for like purposes, and the surplus revenue deposited with this State by the United States (until reclaimed), shall be preserved inviolate and undiminished; and that the interest and income arising from such funds shall be faithfully applied to the object of the original gift or grant: *Provided*, The general assembly may at their discretion appropriate all or only a part of the proceeds of the surplus revenue to educational purposes.

SEC. 3. The general assembly shall provide for the election of a superintendent of schools and seminaries of learning under the care and patronage of the State. They may also provide for the election or appointment of such assistant superintendents or other officers as may be necessary to carry into effect a thorough and uniform system of common-school education; and they shall prescribe by law the terms of office, compensation, powers, and duties of all officers elected or appointed under the authority of this section.

SEC. 4. The general assembly shall provide by law a system of common schools, and permanent means for the support thereof, by which a school shall be kept in each school district in this State not less than six months in each year, and which shall be open to youth of all classes, under such regulations as may be prescribed by law; *Provided*, That black and mulatto youth shall not attend the schools for white youth, unless by common consent.

SEC. 5. Provision shall be made by law for the establishment and support of as many normal institutes as the general assembly may find to be necessary for the thorough instruction of professional teachers of the common schools of the State; and all persons applying to any of said institutes for admission and instruction shall be required, before admission, to give such assurance as may be specified by law of their intention to devote themselves to teaching as a profession.

SEC. 6. No religious sect or party shall ever have exclusive right to or control of any part of the common-school fund, or of any of the schools, seminaries, or institutions of learning under the care and patronage of the State.

At the Cincinnati session the foregoing reports were fully discussed. Upon the various amendments offered the following points were elicited, indicative of the temper of the body:

1. That it was inexpedient to limit the educational bounty of the State to white children by any terms of direct exclusion, but how far colored children should be entitled to public instruction was made a subject of unrestricted legislative cognizance.

2. Propositions to augment the State school fund to a sum which would produce a revenue of about a million of dollars and to enjoin a minimum of six months' instruction were not adopted, some apprehending that the people would not sustain such forward movements, while others believed that the Ohio school system would be even more progressive than its most sanguine advocates in the convention anticipated. The experience of a few years has fully vindicated the latter view.

3. An amendment directing the organization of normal institutes was lost by 20 to 57.

4. Even the clause establishing, in express terms, the office of superintendent of common schools was not retained in the final action of the convention, the precise methods of superintendence being left to legislative discretion. (A Manual of the Ohio School System. James W. Taylor. Cincinnati: 1857. Pp. 211, 212-215.)

of the past. This important measure has been popularly called the Rice act.¹ Its substance is well summed up in its title, "An act to provide for the reorganization, supervision, and maintenance of common schools." Under the head of reorganization the new law took the first step toward the fusion of the rural districts of a township into a single township district, though nearly fifty years were to elapse before the work should be completed. The partial consolidation of the act of 1853 carried with it the substitution of township school taxes for the more local school taxes of the earlier system. The county school tax disappeared. Pursuant to the provision of the new constitution of the State, the sum raised for common schools by levy of the general assembly was greatly increased. Hitherto the State common-school fund had never amounted to more than \$300,000. The act of 1838, which created it, had provided for only \$200,000. The language of the act of 1853 on this subject is as follows: "For the purpose of affording the advantages of a free education to all the youth of this State, the State common-school fund shall hereafter consist of such sum as will be produced by the annual levy and assessment of two mills upon the dollar valuation on the grand list of the taxable property of the State."

Under the district system for country schools, as established in 1853, the township district was composed of subdistricts, which were naturally a continuation of the districts of the old order. Each subdistrict elected a school board of three members; one of these was chosen clerk by his colleagues; the old district meeting survived in the form of the subdistrict election. The school board of the township district was composed of the clerks of the subdistrict boards, together with the township clerk. The township treasurer was ex officio treasurer of the school district. The functions retained to the subdistrict boards were the employment of teachers, inspection of schools, and contracting for buildings, repairs, and furniture. The character of body politic and corporate was taken away. On the other hand, the township school board was created such a body. It was made responsible for all the school property within the township district, having authority also to hold subdistrict boards responsible to itself. Its ordinary functions were to estimate the school tax necessary to be raised by the township levy in order to carry on the schools seven months in the year; to prescribe regulations for all the schools concerning subjects taught, text-books, discipline, etc.; to assume the duties of local directors in any subdistrict where failure or incapacity arose on the part of the regular officers, and to fix, under certain regulations, the boundaries of subdistricts. Naturally enough, cases of conflict arose between the two kinds of school boards. The reports of the State commissioners for the next

¹ A monument to Hon. Harvey Rice has been erected in Cleveland, one of the inscriptions on which styles him the "Father of The Common School System of Ohio." All the provisions of the Rice act that were new are to be found among the resolutions of the State teachers' association for the years immediately preceding its enactment. Mr. Rice's relation to the measure is shown in the following account: It devolved upon the senate of Ohio, at the first session of the general assembly, to initiate the very important measure which is the topic of present consideration. The standing committee of that legislative branch to which the subject of "common schools and school lands" was referred, consisted of Harvey Rice, of Cuyahoga; George Rex, of Wayne, and Alonzo Cushing, of Gallia. On the 29th of March, 1852, they reported the senate bill No. 94, "to provide for the reorganization, supervision, and maintenance of common schools." It reached its second reading April 1, after which it was committed to the committee of the whole and made the order for the same day, but it was not reached in committee until the 13th of April. Its discussion continued until the 15th, when the committee rose, and the bill, with various amendments, was tabled for the residue of the session. * * * The interval between the regular and adjourned sessions of the general assembly had been improved by Mr. Rice, the author of the bill, for a thorough canvass of public opinion. The most experienced teachers and careful legislators of the State had been furnished with copies and their suggestions invited, and probably no similar measure ever engrossed more anxious attention than did the well-known "Senate bill No. 94," from the beginning to the close of the session of 1852-53. (A Manual of the Ohio School System. James W. Taylor. Cincinnati: H. W. Derby & Co., 1857, pp. 215, 216, 220.)

few years say much on the subject. A seemingly important provision of the law was the one that authorized any board of education to appoint one of its members acting manager of schools for the township, with such duties as the board might prescribe with relation to the management and supervision of the different schools. Any member of a school board appointed to such duty was to receive compensation for his services. It does not appear, however, that acting managers of schools were appointed to any great extent.¹ In addition to the duties enumerated above, the control of any "central or high school" that the township carried on was vested in the township board. Authority was given to establish schools of a higher grade than primary after the qualified voters of the township should have authorized the necessary steps, granted the taxes, etc. In city and village districts school boards were clothed with larger powers in the matter of providing for secondary instruction.² The law authorized them to divide their districts into subdistricts, establish schools of different grades, ordain rules for their regulation, etc. Herein could be found authority to establish "central or high schools" without submitting the question to the voters of the district. The law of 1853 did not clear away the existing mass of special school systems. One of its provisions was that the new act should not interfere with schools governed under the Akron law or the law of 1849 for cities and towns. It authorized cities and towns to adopt the new law in place of any earlier one by vote of the qualified electors. The scheme which it offered for the administration of city and village schools was no advance beyond the Lewis act. The reports of the State commissioners of education give instances in which boards of education did not know under which law their schools were organized. Under the head of supervision the new law repealed the act to create a board of public instruction. It restored the office of State superintendent under the title of "State Commissioner of Common Schools."

The regulations relating to this office are that the State commissioner shall be elected triennially for a term of three years by the qualified electors of the State, and shall give bond to the State in the sum of \$10,000. He shall have an office at the seat of government. His duties shall include encouraging teachers' institutes, conferring with township boards of education, counseling teachers, visiting schools, and delivering educational lectures. He shall spend at least 10 days annually in each judicial district. He shall purchase and direct the distribution of the libraries and apparatus provided for in this act, have a certain supervision over the educational funds of the State, prepare forms for school reports, direct the printing and distribution of school laws, and make an annual report to the general assembly. His salary shall be \$1,500 annually, to be paid out of the State treasury.

Among the miscellaneous provisions of this law should be noticed the special State tax of a tenth of a mill for the purchase of common-school libraries; the appointment of county boards of examiners by the probate judge; the allowance of \$1.50 a day to such examiners, to be paid out of the county treasury; the addition of orthography to the list of subjects in which examination was required, and the dropping of the sex qualification for admission to the evening schools. The management of colored schools was intrusted to the regular district school board. Separate schools for colored children might be established if the number of colored scholars in any district was equal to 30. They were to be discontinued for a period of six months after the average attendance had fallen below 15 for

¹ Fourth Annual Report of the School Commissioner. Columbus, 1858, p. 18.

² At the commencement of 1847 there was not a single well-organized public high school in the State. Now there are more than forty in which a thorough academic education is given, besides nearly an equal number in which instruction is given in some of the higher branches. (Report of A. D. Lord, 1854, as general agent of the State teachers' association, quoted in *American Journal of Education*, Vol. VI, p. 535.)

any one month. The school law of 1853 repealed a mass of legislation equal to ten times its own bulk, although it numbered 69 sections itself.

V. THE PERIOD 1853-1873.

It was natural that some retrogression should follow such a long stride forward, but it is gratifying to find that almost all of the thrusts at the new law were parried in the general assembly by a wise majority. The rate of the State school tax was reduced to a mill and a half at the session of 1854.¹ The library tax clause was allowed to operate for the years 1854, 1855, and 1856; it was suspended for 1857; again for 1858; it was allowed to operate for 1859; but in 1860 it was repealed.

Twenty years elapsed before there was further public-school legislation of very great importance. The interval was not so productive of new features as the fifteen years between the Lewis act and the Rice act had been. In 1857, April 17, a mode of procedure was prescribed by which teachers who had been dismissed could bring suit against the district or subdistrict. Provision was made January 24, 1859, for the school board of any incorporated village to unite with the board of the township in which the village was situated for the establishment and maintenance of a central high school. On March 18, 1865, that section of the law that related to colored schools was amended. The amendment provided that all school officers having authority in the premises should establish separate schools for colored children when the whole number of such children exceeded 20; when the number was less than 20, joint colored districts might be formed; when distance rendered separate schools impracticable, the full share of school funds belonging to colored children was to be set apart and appropriated each year for their education, which indefinite arrangement proved inadequate in practice. On the same day the law was passed that created the State board of examiners. This body as originally organized consisted of three members, who were appointed by the State commissioner of common schools. It held its first meeting in July of 1864, and granted eleven State certificates. It was also provided at this time that every applicant for a teacher's certificate should pay 50 cents for the privilege of being examined, and that the fund accruing from this source should be paid into the county treasuries and constitute teachers' institute funds. It would have required only a little foresight to perceive that the component parts of township school districts as arranged by the law of 1853 were not likely to hold together in all cases, with the question of maintaining "central or high schools" left to the vote of the electors of the township. The "special school district" was added to the types that had been differentiated earlier, by an act of April 19, 1867. This measure made it lawful for any subdistrict or group of contiguous subdistricts which contained not less than 275 inhabitants to become a separate school district. Separate German schools were still in vigorous life, as is shown by the act of May 8, 1868. This required that all teachers employed to teach German should be examined and found qualified to teach in that language all the branches taught in the common schools. An act of April 16, 1870, made the managing authorities of teachers' institutes responsible for furnishing statistics of such institutes to the State commissioner of common schools. A vaccination law was passed March 7, 1872. This seems to have been the earliest sanitary measure affecting schools. March 31, 1871, is the date of the first of that very interesting group of laws which were necessi-

¹ According to the best authority on the history of the Ohio school system for this period, this step did not actually cause any loss to the schools. The State school tax, at the session of 1854, was reduced from two mills to a mill and a half. Nevertheless, in the presence of a grand duplicate much enlarged by the revaluation of real estate in 1852-53 and the legislation pursuant to the new constitution, the amount collected at the lesser rate was \$1,208,283.84, against \$1,118,089.02, which was the proceeds of the two mill levy of 1853. (*A Manual of the Ohio School System*. James W. Taylor, p. 233.)

tated by the activities of school-book publishing houses. Its language seems to imply that the book agent was abroad. Herein the following conditions were imposed upon the changing of text-books: The expiration of two years since the adoption of the book already in use, otherwise a three-fourths' vote of all the members of the board, the action to be taken at a regular meeting.

Within this interval of twenty years there was special school legislation for the cities of Cleveland and Cincinnati. The Cleveland law of 1848 had silenced the charge that the high school of that city was not authorized by law. In 1859 a much more elaborate school law was enacted for Cleveland. It provided that the board of education should be elected upon the principle of ward representation. It authorized the appointment of a superintendent of schools, with the curious requirement that he be appointed from the body of qualified voters of the city. This, however, was dropped the next year. In its provision for a superintendent of schools the Cleveland law had been anticipated nine years by the Cincinnati law. Three persons were to be appointed in each ward to act as a visiting committee. The date of the next act applicable only to the Cleveland schools was 1868. The growth and increasing complexity of the school machinery are reflected in the detailed character of the provisions of this law. Hereby the board of education is to consist of two members from each ward, elected one annually for a term of two years. Regular board meetings are to be held once in two weeks. The board is empowered to appoint a secretary, not of its own body; also an overseer of buildings. Compensation for services and pecuniary interest in any contract on the part of any member of the board are declared unlawful.

The Cincinnati school law of 1833 differed greatly from the original one which had been passed in 1829. It declared that the school board should consist of two members chosen from each ward. It vested in this body, and no longer in the city council, the functions of levying school taxes, providing schoolhouses, and laying off school districts. It required that the school board should sustain a suitable number of German schools and of colored schools. The next year the additional requirement was made that the regular school board should appoint colored directors for the colored schools. In 1856 it was provided that such directors should be chosen by the adult colored males of the city. The different way that the race question has operated on the school system of the two leading cities of the State and the circumstances which caused this difference would be an interesting subject for investigation.

The school law of May 1, 1873, is the longest document which the investigator of the present subject has to examine. It also comes the nearest to being tedious. It made no great contribution to the principles that shape the school system of the State; neither did it add any important device to its machinery. It repealed practically all of the school legislation that it found in force—some twenty-six laws and numberless amendments. It stated their substance anew, going back as far as the laws that related to school lands and to the funds accruing therefrom, but where there had been a confusion of schemes, as for cities, towns, and villages, it brought order out of the chaos. This legislation is classed with the epoch-making measures of 1835, 1838, and 1852 by reason of its giving the State a school code in a more scientific sense than that in which it had one before.¹

¹ The following is a good specimen of the calls for the codification of the school law that had been heard for several years:

The necessity of a codification of the school laws was presented in the last and also in several preceding reports. A codified bill was introduced in the general assembly last winter which was received with great favor, but it failed to become a law. There are about 40,000 school officers and 20,000 teachers in the State. That they may be enabled to perform their duties understandingly the school laws should be plain and definite in statement, so as to reduce all doubts as to their meaning to the fewest possible. A codified bill, it is hoped, will secure this desirable result, as well as furnish the occasion for making such changes in our school system as may be deemed expedient. It is confidently expected that the general assembly will pass an act which shall comprehend the whole system of the State, and be easily interpreted and

The new law classified school districts as city districts of the first class, city districts of the second class, village, special, and township districts. All cities having a population of 10,000 or upward were to constitute the first class of districts; those having a population of less than 10,000 the second class; every incorporated village a village district; every organized township a township district; school districts which did not correspond to any of these districts, but were organized by act of the general assembly or by vote of the electors in accordance with such act, were special districts. It is noteworthy that no progress is herein made in the centralization of country schools, and that subdistricts remain as they had been established twenty years before. The schemes of administration for the respective classes of districts are as follows: In a city district of the first class the board of education is composed of two members from each ward, but any such district whose board already consists of only one member from each ward may remain as it is. The term of office is two years. Elections are so adjusted that where the two-member system is established each ward shall elect one member annually, and where the one-member system is retained the wards having odd numbers shall alternate with the even-numbered ones in holding school elections. In city districts of the second class, as well as village districts, the board of educa-

administered. (Eighteenth Annual Report of the State Commissioner of Common Schools, Columbus, 1872, p. 55.)

Little heed was paid to the changes that had been recommended by the educators of the State. The annual reports of Wilson D. Henkle and Thomas W. Harvey, the State commissioners of common schools, during the period when the codification of the school law was being agitated, had urged upon the general assembly the need of provision for county superintendency, State normal schools, and township districts that should be such in fact. The Ohio superintendents' association resolved, July 4, 1871, "That the association approves the recommendations that have been from time to time made by the Ohio teachers' association and the State commissioners of common schools in reference to engrafting upon the common-school system of Ohio the following features: A judicious and efficient system of county superintendency; the adoption of the township system of school administration; an efficient system of district normal schools." (Published in Proceedings of Ohio Teachers' Association, 1868-1875, p. 82.) It was also resolved by the same body that the constitution of the State should be so amended as to provide for an efficient State board of education, the secretary of which should be the State commissioner of common schools. (*Ibid.*)

A third constitution was framed for the State of Ohio by a convention that sat at Columbus May 13 to August 18, 1873, and at Cincinnati December 2, 1873, to May 15, 1874, but when it was submitted to the people for their ratification it was rejected by a large majority. The course of the debate on education may be inferred from the character of the resolutions. On May 20, 1873, a resolution was introduced to the effect that the standing committee on education be, and hereby are, instructed to inquire into the expediency of making the commissioner of common schools a constitutional officer. This was reported back by the committee on education without recommendation. Later a resolution was introduced to secure the perpetual maintenance of separate schools for white and colored children, but to permit the admission of both to the same school upon vote of two-thirds of the electors of any school district. This seems to have attracted no further attention. The report from the committee on education was read to the convention on February 14, 1874. The six members united in the opinion that a section 3 should be added to Article VI of the constitution as adopted in 1851, to wit, that women over 21 years of age should be eligible to any office under the school laws of the State. Four members of the committee recommended the following addition to section 2 of Article VI: "The power of taxation conferred by this section shall be limited to a sum sufficient to educate all the children of the State in such common and necessary branches of learning as shall be provided by law." Another group of four recommended the addition of a fourth section to Article VI of the constitution: "The general assembly may, by law, require that every child of sufficient mental and physical ability shall attend the public free schools during the period between the ages of — and — years, for a term equivalent in the aggregate to — years, unless educated by other means to the same extent." One member proposed to strike out that clause of Article VI, section 2, which prohibits any religious or other sect or sects from having exclusive right to or control of any part of the school funds of the State. After the final revision by the convention, the education article contained three sections: 1 and 2, as in the constitution of 1851, 3, as follows: "Women having such qualifications as to age, citizenship, and residence as may be prescribed for electors shall be eligible to any office under the school laws except that of State commissioner of common schools." (Debates Ohio Convention, Cleveland, 1873-74.)

tion is to consist of six members, unless it has already been established with only three, the term of office being three years; such districts may, however, adopt the one-member system of ward representation. In township districts the school board is to remain as constituted by the law of 1853. In special districts it is to consist of three members, elected one annually for a term of three years. The new law takes an important step in separating school government from the municipal government by vesting in the board of education any property for the use of schools that had hitherto been invested in the city or town council. It empowers the board of education of each school district to appoint a superintendent of schools and to fix his salary, which had not been done before except by implication. It also goes further than the act of twenty years before in its provision for secondary instruction; it says that one or more schools of higher grade shall be established whenever the board of education shall deem it necessary for the welfare of the educational interests of the district.

The regulations for examining and certificating teachers were much changed in points of detail. The most important new features were the addition of the theory and the practice of teaching to the list of subjects; the disqualification of persons directly interested in normal schools as teachers for the office of examiner, the exemption of teachers of special subjects from the regular examination. Teachers' institutes were put on a less voluntary basis than before by authorizing the State commissioner to organize an institute association in every county where there was none already existing. It was made voluntary with city districts of the first class to hold separate institutes for their teachers. An end was made of separate German schools by that provision of the law which required the common branches to be taught in the English language. The German language was permitted to be taught as a separate study at the discretion of any school board, and instruction therein was obligatory upon a sufficiently strong petition from resident freeholders of the district. The new law raised the minimum legal school age from 5 years to 6. It defined the school week as consisting of 5 days and the school month of 4 weeks; it fixed the minimum annual session at 24 weeks and the maximum at 44; it set apart as legal school holidays New Year's Day, the Fourth of July, Thanksgiving Day, and Christmas. Finally, the fiscal provisions of the act were that the State common-school fund should consist of such sum as would be produced by the annual levy and assessment of 1 mill upon the dollar valuation on the grand list of the taxable property of the State, and that boards of education might levy upon the taxable property of their districts as high as 7 mills. Although the rate of district taxes has been frequently restated, 7 mills has usually been the maximum for all districts except the large cities, for which special rates are fixed by the school-tax laws.

VI. THE PERIOD 1873-1900.

Since the school law was codified in 1873 there have been additions of the greatest interest and importance. Some of these are compulsory education, woman suffrage on school questions, free school books, and the centralization of country schools. Almost all of these have been made within the last ten years, although several less novel changes were made earlier. In 1875 it was made lawful for all districts except those of the township class to maintain evening schools. The same classes of districts were given authority to expend public money for library books and philosophical apparatus. In 1881 authority to appropriate money for library books out of their contingent funds was extended to all districts, as the old provision for a school-library tax that was made in 1853 and repealed in 1860 had never been reenacted.

Relative to the certificating of teachers, the legislation has been extensive and

complicated. In 1882 the candidate's experience in teaching was made an element in the grading of the certificate. In the same year United States history was added to the list of subjects; in 1888, elementary physiology. A law of April 16, 1888, handled the subject of examinations in all its parts. It declared that the State board of examiners should consist of five members, residents of the State; that they should be appointees of the State commissioner of common schools, and that not more than three of them should belong to the same political party; it authorized this board to issue life certificates of three grades for three different grades of schools. New restrictions were imposed upon county boards of examiners by this law. An interest in any publishing or book-selling concern was made a disqualification for membership. The grades of county certificates were fixed at one, two, three, and five years. Boards of city examiners were to consist of either three or six persons, as the board of education should determine; five years' experience in teaching was made a qualification for eligibility to the position; but in 1891 this requirement was eased so that it was necessary for only two members of the board to have had such experience, and the period was reduced to two years. The law of 1891 on this subject set up also an experience qualification for members of county boards of examiners. In 1893, April 25, an important act was passed entitled, "An act to provide for a uniform system of examinations of teachers in the State of Ohio." It fixed upon the second and fourth Saturdays of the ten months from September to June as the days upon which county examinations should be held, and ordered that the questions used at these examinations should be prepared by the State board of examiners and the State commissioner of common schools. This act, however, is not mandatory. Civil government was added to the list of subjects by act of February 20, 1896. On April 6 of the same year certificates valid for eight years were authorized. The classification of teachers' certificates as pertaining to counties was readjusted April 13, 1898, and now stands:

The board may grant certificates for one, two, and three years from the day of examination, which shall be valid in the county wherein they are issued, except in city and village districts that have boards of examiners, * * * and the examiners may grant certificates for five years to such applicants as, in addition to the necessary qualifications, have been for three years next preceding their application engaged in teaching, twelve months of which shall have been in one place; and such certificates for five years shall be renewable upon the same condition, but without examination, at the discretion of the examining board; and the examiners may grant certificates for eight years from the date of examination to such applicants as, in addition to the necessary qualifications, hold or have held certificates for five years and shall have been for three years next preceding their application engaged in teaching, eighteen months of which experience shall have been in one place; and the applicants for such certificates for eight years, in addition to the other qualifications, shall be required to pass a satisfactory examination in botany, algebra, natural philosophy, and English literature; and such certificate for eight years shall be renewable upon the same conditions, but without examination, at the discretion of the examining board.

The general assembly of 1900 authorized the board of examiners for Cincinnati to grant life certificates. It is a noteworthy matter that one of the qualifications for these certificates is the evidence of a satisfactory knowledge of the history of education, science of education, and psychology. In city and village districts which have special boards of examiners the gradation of certificates has always been left to those bodies.

By acts passed in 1885-86 subdistrict directors were authorized to provide fences and trees for the schoolhouse grounds. In 1885 an act was passed enabling township, village, and special school districts to unite into one special district for the purpose of maintaining a high school only. In the same year that section of the law which regulated the change of text-books was so amended that the time neces-

sary to elapse after the adoption of the book in use was increased to five years; otherwise there must be favorable action by three-fourths of the school board, taken at a regular meeting. By an act of March 21, 1887, the classification of school districts into five groups was so enlarged as to add at the head of the list city districts of the first grade of the first class and city districts of the second grade of the first class; this was a device to put Cincinnati and Cleveland each into a class by itself.

An act was passed April 11, 1888, to expedite the collection and publication of school statistics. The reports which are required of the different groups of school officers culminate in the annual report made by the State commissioner of common schools to the general assembly. The first group of statistics required by the law, as it now stands, relates to the enumeration of the school youth. This is taken annually in each school district, all unmarried persons from 6 to 21 years of age resident in the district being included. The clerk of the school board is required to transmit the district enumeration to the county auditor; the latter officer, to the State commissioner. In the second place, each board of education is required to deposit with the county auditor statistics of the following facts: Receipts and expenditures for the district; the number of schools sustained, and the time they are in session; the enrollment of pupils, with average monthly enrollment and average daily attendance; the number of teachers employed; salaries; the number of schoolhouses and schoolrooms, and such other facts as are required by the State commissioner. The latter officer receives these reports through the county auditors. The third group of school statistics relates to teachers' examinations. The clerk of every county board of examiners is required to transmit directly to the State commissioner statistics of the following matters: The number of examinations held within the year; the number of applicants examined; the number of certificates granted; the amount of fees received, and the amount received from the county treasurer for the services of the board of examiners. In the fourth place, each teachers' institute committee is required to report directly to the State commissioner the number of teachers in attendance, the names of instructors and lecturers, the amount of money received, etc.

On February 22, 1887, the "black laws" were repealed. This included that section of the school code which authorized separate schools for colored children.

Strange to say, the subject of normal schools is conspicuously absent from the statute books of the State of Ohio.¹ The sole provision of this character is for the maintenance of a combined normal and industrial department at Wilberforce University, Greene County. This department was established by act of March 19, 1887.

The law imposed a check upon nepotism in the public schools in 1889, April 5, by declaring it unlawful for any local director or member of a board of education to vote for or participate in the making of any contract as a teacher with any person to whom he is related as father or brother. A penalty for the offense was imposed.

The first compulsory school law was enacted April 15, 1889. Its title was, "An

¹ Extending over a period of sixty years, the claims of normal schools were never more forcibly or intelligently presented than in Ohio by Governor Worthington (1817), Calvin E. Stowe (1837), Samuel Lewis (1839), Emerson E. White (1865), and others. The question can not fail to occur, Why, then, has Ohio no State normal school in this year of grace 1876? (Delia A. Lathrop, *Normal Schools, Education in Ohio: Centennial Volume*, Columbus, 1876, p. 235.)

After showing that every one of these agitations proved to be ill timed, this writer goes on: "The idea is quite prevalent among legislators that the professional work demanded is being satisfactorily carried on by private enterprise, and if the State does not intermeddle, the supply and demand will in time somehow regulate themselves." (*Ibid.*, p. 237.)

act to compel children under 14 years of age to attend school a certain length of time."¹

The chief provisions are as follows: That all parents, guardians, and other persons who have care of children shall instruct them, or cause them to be instructed, in spelling, reading, writing, English grammar, geography, and arithmetic, and that every person having control of a child between the ages of 8 and 14 years shall be required to send such child to a public or private school for a period of not less than twenty weeks in each year in city districts, at least ten weeks of which shall be consecutive, and in village and township districts not less than sixteen weeks, eight of which shall be consecutive. Authority to excuse children from such attendance, upon its being shown that their physical or mental condition will not permit it, or that they receive suitable private instruction, is given to school superintendents and boards of education. The employment of any child under 14 years of age by any person or corporation is forbidden unless substantial proof be given that the school requirement has been complied with. The law fixed a fine of \$50 as the penalty for employing any child contrary to this law. It further provided that all minors between the ages of 14 and 16 years who can not read and write the English language are required to attend school one-half a day, or to attend evening school, or to take regular private instruction to the satisfaction of the school authorities, and employers of such youth are held responsible for the observance of this requirement. The penalty laid upon parents and guardians for neglecting to comply with the requirements of this law was originally a fine of from \$5 to \$20 for the first offense, to be increased for later offenses. The chief official responsible for the enforcement of the compulsory education law is the truant officer. He is vested with police powers, is authorized to enter factories, workshops, stores, etc., and to perform such services as the superintendent or board of education may deem necessary. Some suspension of the law at the discretion of the proper authorities is provided for in cases where the employment of children is found to be absolutely necessary to the family support. If children are proved to be habitual truants, the law prescribes their commitment to some juvenile reformatory. In 1890 the additional requirement was made that the youth aged from 8 to 16 years must attend school for the full term in their respective districts unless they were engaged in some regular employment or were duly excused. The original act on this subject was superseded April 25, 1893, by the present law, which is entitled "An act to compel the elementary education of children." This repeats the main provisions of the original measure; it further establishes the right of parents and guardians to appeal from the decision of a superintendent of schools or a board of education to the judge of the probate court; and it authorizes the officers charged with poor relief to give aid in cases where children are required to be kept from school for the support of the family. This latter legislation also lightened the penalties imposed for violation. By virtue of a factory law that was enacted April 19, 1898, the age up to which attendance at school is compulsory was practically raised to 15 years.

¹ In 1838 Samuel Lewis had written: "It must be admitted that education is as important here as in Prussia, but different means must be used to secure its influence. There the King issues his edict and obedience follows. It would not be politic here to make a law compelling children to attend school; but we must exert some other influence." (First Annual Report of the Superintendent of Common Schools, Columbus, 1838, p. 31.)

Among the rejected propositions for amendment to the act of 1853 that were offered while the bill was under consideration in the lower house was one imposing a fine on guardians for not sending children to school at least three months in the year. (System of Common Schools in Ohio, William T. Goggeshall, p. 101.)

In 1871 a report on compulsory education was read before the State teachers' association, and a resolution in favor of a truant law was adopted. (Proceedings of the Ohio Teachers' Association at its Twenty-third Annual Meeting, pp. 3, 5.)

It has already been noticed that this subject attracted some attention in the constitutional convention of 1873-74.

In 1892, April 13, it was enacted that training in physical culture should be given in the common schools of the city districts. On March 14, 1893, a law was passed to secure schoolhouse sanitation. It required that school buildings should be inspected at least semiannually by the board of health. On March 22 of the same year evening schools were provided for on a larger scale than ever before. This gave authority to the school board of any kind of a district to establish such a school upon receiving from parents and guardians of school youth a petition which gave the names of at least 25 youths of school age who desired to attend school, but were prevented from doing so during the day.

The kindergarten was authorized as a part of the common-school system which might be established in city, special, and village districts, by act of April 27, 1893. A special tax of 1 mill was authorized for this purpose.

The act to secure a voice in school affairs to the women of Ohio on equal terms with men was passed April 24, 1894. It declares that every woman born or naturalized in the United States, 21 years of age, who has resided in the State one year and in the electoral district the same time as the law requires for men, is entitled to vote and be voted for at any election for choosing school directors, members of boards of education, or of school councils.

On March 25, 1896, was passed the law that requires the United States national flag to be displayed upon schoolhouses during the daily school session.

The undertaking of the State to furnish free school books has grown out of a series of steps to secure cheap school books.

The first law on this subject was enacted April 22, 1885. It authorized boards of education to buy books and school supplies directly from the publishers or dealers at the lowest wholesale or contract price, drawing upon the contingent fund for the purpose, and to furnish the same to pupils at cost price. In 1890 a law was passed to create a schoolbook board. This body was to consist of the governor of the State, the State commissioner of common schools, the State superintendent of printing, one practical educator, and two practical business men, one of these to be selected from each of the two leading political parties. Their duties were to fix upon prices which might be paid for schoolbooks, which were not to exceed 80 per cent of the lowest prices offered at the time by publishers to dealers; to receive propositions from publishers, and to furnish boards of education with lists of books and prices as agreed upon. School boards were required to adopt books found on these lists until they proved insufficient. This scheme was carried further by an act of May 4, 1891. This authorized the schoolbook board, in case the publishers' proposals proved to be insufficient, to contract with authors or compilers for a series of schoolbooks for the State of Ohio. The date of the free-schoolbook law is May 16, 1894. Boards of education are hereby permitted to furnish the necessary schoolbooks free of charge, and are authorized to levy an additional tax for the same. The books are retained as the property of the school district, being loaned to pupils on terms prescribed by the board.

Legislation on the interesting and highly important subject of country school centralization has been as follows: An important act was passed on March 15, 1892, which declared that the office of local director in each subdistrict should come to an end, as soon as directors should be elected and should qualify under the new law; that the entire management and control of the schools of the township district should be intrusted to the township school board, and that this should consist of one director elected from each subdistrict for a term of three years, with the township clerk serving as clerk of the school board but having no vote. The same assembly, a week later, March 22, passed a law that accomplished the articulation of the country schools with the public high schools. This provided for the examination of pupils in the country schools under the direction of the board of examiners for their respective counties in all the common branches of study; also for

the awarding of diplomas to successful candidates, which should secure their admission to the high schools of the county without further examination. The law also permitted any board of education to pay tuition charges at such high school for any pupil belonging to its district. A part of this work of centralization was to be undone. The office of subdistrict director was restored by act of March 11, 1898. This put the township school districts anew into the plight of having one township board of directors together with as many subordinate boards as it had subdistricts. By the terms of this act the township board was to be organized into three standing committees on the subjects: Teachers and text-books, buildings and grounds, and supplies. The function of the subdistrict board was merely the appointment of teachers.

The cause of country high schools was advanced by an act of April 25, 1898, which enabled two adjacent township districts to unite in the support of such a school. This act also made it obligatory for a township board to submit the high-school question to the voters of the district upon the petition of ten such persons. It also authorized the discontinuance of subdistricts of less than 15 pupils. Finally, the general assembly of 1900 dealt the decisive blow to the subdistrict system, or, more accurately, it defined the nature of the blow, leaving the question whether it should be dealt to the voters of the townships. The act to provide for the centralization of township schools and provide a high school for the same was passed on April 16, 1900. "Centralization" is herein defined as "a system of schools in a township providing for the abolishment of all subdistricts and the conveyance of pupils to one or more central schools." By the terms of the act the question of centralization may be submitted by any township board of education to the voters of the district, and must be submitted upon petition of one-fourth of them. If it fails to carry, two years must elapse before it is submitted again. If it carries, the board of education must proceed at once to secure a building site and erect suitable schoolhouses. The board of the old type, consisting of one member from each subdistrict, together with the township clerk, gives place to a board of five members. These are elected for a term of three years, not more than two members being elected any one year. The township clerk and treasurer are ex officio clerk and treasurer of the school board. Boards of education thus constituted are required to maintain and support a graded course of instruction, and may include a high-school course of not less than two years. They are also required to furnish transportation to and from school to all pupils living more than three-fourths of a mile from the central building. Two days later, on April 18, the assembly supplemented the law providing for the admission of country school pupils to high schools by enacting that boards of education are bound to pay the tuition charges of pupils belonging to their districts unless the district maintains a high school of its own. The operation of the centralization law is bound to be watched with eager interest. The summer of 1900 saw considerable activity in the erection of buildings for the use of centralized schools.

Another movement of absorbing interest in the school legislation of recent years is the return to special systems for the cities. The classification of city school districts was made to follow that of cities more closely than before by act of April 12, 1900. The advantage of this device for the purpose of special legislation is obvious. The present Cleveland school law was enacted March 8, 1892; the Toledo law, March 23, 1898; Cincinnati has a series of special laws enacted March 21, 1887, May 17, 1894, April 14, 1896, and April 16, 1900. The Cleveland law created a double governing authority in the form of a school council and a school director. Both are elected by the people. Members of the council receive \$360 annual compensation. The director is expected to devote his entire time to the duties of his office, and receives a salary of \$5,000. The ordinary executive functions are vested in the director; the ordinary legislative power in the council,

which consists of seven members. The superintendent of instruction is appointed by the director and confirmed by the council; he is removable by the director, under certain conditions. The appointment and removal of teachers is vested in the superintendent, subject to the approval of the council.

The Toledo law created a board of education, consisting of five members. These are chosen by popular election. The superintendent of instruction is the appointee of this body. He himself appoints and removes teachers, subject to approval by the board of education. The board appoints also a business manager to be its executive agent.

The Cincinnati system still retains ward representation as the principle upon which its board of education is constituted. That body, after readjustment by the acts of 1887, 1894, and 1896, consists of one member from each ward, elected for a term of three years. The nomination of teachers was vested in the superintendent of instruction by the act of March 21, 1887. The act of April 14, 1896, developed an appointment schedule, which that officer is obliged to follow. Hereby a teacher after a service of five years in the high school, or seven years in the elementary grades, is secure against removal except for specified causes. The same act created also the teachers' pension fund, with accompanying provisions for the retirement of teachers. The pensioning system was modified in detail by the act of April 16, 1900. The fund is at present maintained by deducting \$2 a month from the salary paid to every teacher in the schools and by donations. Teachers may be retired on account of physical or mental disability after twenty years of service, fifteen of which must have been rendered to the schools of the city or, at least, the county. Such retirement must be sanctioned by vote of the board of education. After thirty years of service, fifteen of which have been rendered to the city or county, a teacher may retire at will. Beneficiaries of the teachers' pension fund must have contributed to that fund a sum equal to \$20 for each year of service, but the total contribution is never to exceed \$600. The amount of pension paid is \$10 annually for every year of service rendered, but in no case can it exceed \$500 a year. In 1896, April 27, the law created a school-teachers' pension system for Toledo, and on April 10, 1900, the same thing was done for Cleveland.

The school law as unified in 1873 can be identified in the statute book, as it reads to-day, only with difficulty, it has been added to or subtracted from in so many parts. As was the case in the fifties and sixties, its most progressive portions are special systems. It has already been seen how the centralized administration and large privileges that were granted to special cities and towns at the middle of the century came within a few years to be the rule for those classes of districts. It remains to be seen whether the special laws of the close of the century are going to remain only an excrescence upon the general system. Are nonpolitical school boards, a larger element of one-man power with its fixed responsibility, security of tenure for teachers, etc., going to become regular features of the system? In the light of such facts as the provision for centralized rural schools and additional special legislation for city schools, it is safe to say that the general assembly of 1900 did not complete the story of the Ohio school laws, but left it involved in new issues of the greatest import that must yet be worked out.



CHAPTER III.

CONSOLIDATION OF SCHOOLS AND TRANSPORTATION OF PUPILS.¹

CONTENTS: A visit to the centralized schools of Ohio—Consolidation of schools and conveyance of children in Massachusetts—Transportation of pupils in Indiana—An inquiry regarding conveyance of children in New Hampshire.—Transportation of pupils in Nebraska.

A VISIT TO THE CENTRALIZED SCHOOLS OF OHIO.

[From a report made by O. J. Kern, superintendent of Winnebago County (Ill.) schools, December, 1900.]

In company with State Superintendent Bayliss and Supervisor Black, of Owen, chairman of the committee on education of the Winnebago County board, I had the great pleasure of visiting the centralized schools of northeastern Ohio in October last. It was an extremely interesting and profitable trip. So numerous have been the inquiries for information concerning the improved system for district schools in Ohio that as a result this report is given in pamphlet form, in the hope that what is herein described of our visit to Ohio may lead to better things for Illinois. * * *

The first place we visited was Perry, Lake County, where there is a township high school. The principal, Professor Morrison, is a pioneer in the matter of centralization. He assured us that the experiment was no longer an experiment; that the new movement was the logical solution of the country school problem, and that centralization of districts with transportation of pupils had come to stay. It gave much better schools with but a slight, if any, increase in the cost to the township. The opposition to the plan has long since died out. This has been the testimony at every place visited thus far. At this particular place, however, there was only one wagon drawing children. So we drove on to North Madison, in Madison Township, where three wagons are used. On our way there we saw the first wagon. We stopped at the farmhouse and talked with the driver. He carried all the children from one district, about twenty in number. His route was 5 miles long. That is to say, starting at the first home to pick up a child until he arrived at the central school was 5 miles.

Then he drove back home after delivering the children, thus covering 10 miles in the morning. Of course he traveled the same ground after school, thus making 20 miles in all. He got \$1.20 a day for his work. We asked him if he made any money at it. He said he did, as he was working a small farm that did not require all the time and labor of himself and team. We asked him if he had any trouble with the children and he replied none. He said he was employed by the township

¹For other information upon this subject in the Bureau's Reports, see Rep. 1894-95, Vol. 2, pp. 1469-1482; 1895-96, Vol. 2, pp. 1353-1358; 1898-99, Vol. 1, pp. 526-529; 1899-1900, Vol. 2, pp. 2581-2584.

board of education, who put him under bond to be careful with the children; to have a safe team; to provide a suitable wagon, covered and provided with curtains, and containing soapstones and lap robes for the severest weather. We asked what objections the parents along the route had to the new plan. His reply was that the only objection was on the part of two or three at the beginning of the route, as they had to get their children ready somewhat earlier than they used to when they went to the district school. Of course the children must be ready when the wagon came. He aimed to start at 7.30 and arrive at the building not later than 8.45. Thus there were no children tardy; none came with wet feet or clothing; the attendance was greatly increased and much more regular. The driver believed the movement had come to stay; that the people would not consent to go back to the old way. A short distance on toward the centralized school we had a very interesting conversation with Mr. Fuller, a member of the township board of education. Mr. Fuller is a public spirited, prosperous farmer, and believed in giving the county children the best educational advantages possible. And while the new plan did not materially increase the cost, yet the amount of taxes was not the first consideration. He had four boys. One was at home on the farm; another was in Delaware University; a third was in school in Cleveland, while the fourth was in business in Cleveland. His girls were in the centralized school. He knew the value of the new plan and was sure the people would not go back to the old method. The opposition had long since died out, and the bitterest opponents three or four years ago are now the most enthusiastic supporters. They have seen the value of a well-graded school, with good teachers, over an ungraded one, with oftentimes indifferent teachers. We visited the schoolhouse during the noon hour and did not have time to see the school in operation. We next drove to Unionville, and had a pleasant visit at a two-room school. The children were fine specimens of the American public school. The principal, Mr. Adams, was township superintendent for Madison Township, and has had considerable experience with centralized schools. His testimony as to the value of the new system over the old and his belief in the permanence of the movement was stronger if anything than that which we had heard at Perry and North Madison. The cost had not been increased.

We next visited Kingsville, in Ashtabula County, 401 miles east of Chicago. This was our farthest point east. Kingsville is a small village with a township high school. To this school are brought all the children of the township, with the exception of two districts. Four wagons are used, at a cost of \$20, \$25, \$24, and \$28 per month, respectively, for a month of twenty days. The school year is nine months. Five teachers are employed in the building. The testimony of the principal of the school, the town clerk, and Mr. Kinneer, of the board of education, was that there was an actual saving in the total cost to the township under the new plan; and while money was expended for transportation of pupils it was more than saved in the fewer number of schools operated. And as to the increased efficiency of the new centralized school over the scattered schools, that was beyond a question of doubt.

It was here that the Ohio plan of centralization had its origin in 1892. The erection of a new building in one of the districts of Kingsville Township brought up the question whether or not it would be better to abandon the school in that district and take the children to the village school at the general expense. In this first case of consolidation in Ohio the schools were centralized at the village school, a village situated about a mile and a half from the railroad. The results, educationally, in the small districts were far from satisfactory. In order to consolidate and transport children at public expense, special legislation was necessary. So the Ohio legislature passed the following bill April 17, 1894:

SECTION 1. *Be it enacted by the general assembly of Ohio, That any board of education in any township which, by the census of 1890, had a population not less*

than 1,710 or more than 1,715; of any county which, by the same census, had not less than 43,650 nor more than 43,660 inhabitants, may, at their discretion, appropriate funds derived from the school-tax levy of said township for the conveyance of pupils in subdistricts from their homes to the high-school building of such township: *Provided*, Such appropriation for any subdistrict shall not exceed the amount necessary, in the judgment of the board, for the maintenance of a teacher in such subdistrict for the same period of time.

The Kingsville plan proved such a success that on April 27, 1896, the Ohio legislature passed a bill for the relief of the counties of Stark, Ashtabula, and Portage, which provided that the board of education of any township of those counties may, "when in its opinion it will be for the best interest of the pupils in any subdistrict, suspend the school in such subdistrict and provide for the conveyance of said pupils to such other district or districts as may be convenient for them; the cost of such conveyance to be paid out of the contingent fund of said district: *Provided*, The board of any special school district in any county mentioned above may provide for the conveyance of pupils out of the contingent funds, the same as townships aforesaid."

Since then a general law has been enacted permitting the people of any township at the annual town election to vote "yes" or "no" on the proposition to centralize the schools of that township, i. e., to abandon the small districts and transport the children at public expense to the central school. Such, in brief, is the history of the legislation. And as to the result of the Kingsville experiment I can do no better than to quote from the *Arena* for July, 1899.¹ It was a beautiful day in October, 1900, that we visited Kingsville, and our inspection of the school, our conversation with the teachers and school officers, our seeing the children loaded into wagons and driven to their homes, made a deep impression on me at least. But the quotation:

The residents of the subdistricts of Kingsville Township which have adopted this plan would deem it a retrogression to go back to the old subdistrict plan. It has given the school system of Kingsville an individuality which makes it unique and progressive. Pupils from every part of the township enjoy a graded school education, whether they live in the most remote corner of the township or at the very doors of the central school. The line between the country-bred and the village-bred youth is blotted out. They study the same books, are competitors for the same honors, and engage in the same sports and pastimes. This mingling of the pupils from the subdistricts and the village has had a deepening and broadening influence on the former without any disadvantage to the latter. With the grading of the school and the larger number of pupils have come teachers of a more highly educated class. Higher branches of study are taught; the teachers are more conversant with the needs of their profession; the salaries are higher; the health of the pupils is preserved, because they are not compelled to walk to school in slush, snow, and rain, to sit with damp and perhaps wet feet in ill-ventilated buildings. Nor is there any lounging by the wayside. As the use of indecent and obscene language is prohibited in the wagons, all opportunities for quarreling or improper conduct on the way to and from the school are removed. The attendance is larger, and in the subdistricts which have taken advantage of the plan it has increased from 50 to 150 per cent in some cases; truancy is unknown. It has lengthened the school year for a number of the subdistricts; it has increased the demands for farms in those subdistricts which have adopted the plan, and real estate therein is reported more salable. The drivers act as daily mail carriers. All parts of the township have been brought into closer touch and sympathy. The cost of maintenance is less than that of the schools under the subdistrict plan; the township has had no schoolhouses to build; it has paid less for repair and fuel. Since the schools were consolidated the incidental expenses have decreased from \$800 to \$1,100 per year to from \$400 to \$600 per year. In the first three years following its adoption Kingsville Township actually saved \$1,000.

We left Kingsville feeling that we had traveled nearly 500 miles to a good purpose. Before leaving we had an amateur photographer take snapshots of the wagons, children, school building, and ourselves (See plate No. 1.)

¹ The article in the *Arena* referred to was reprinted in the Bureau's Report for 1898-99, Vol. 1, pp. 526-529.

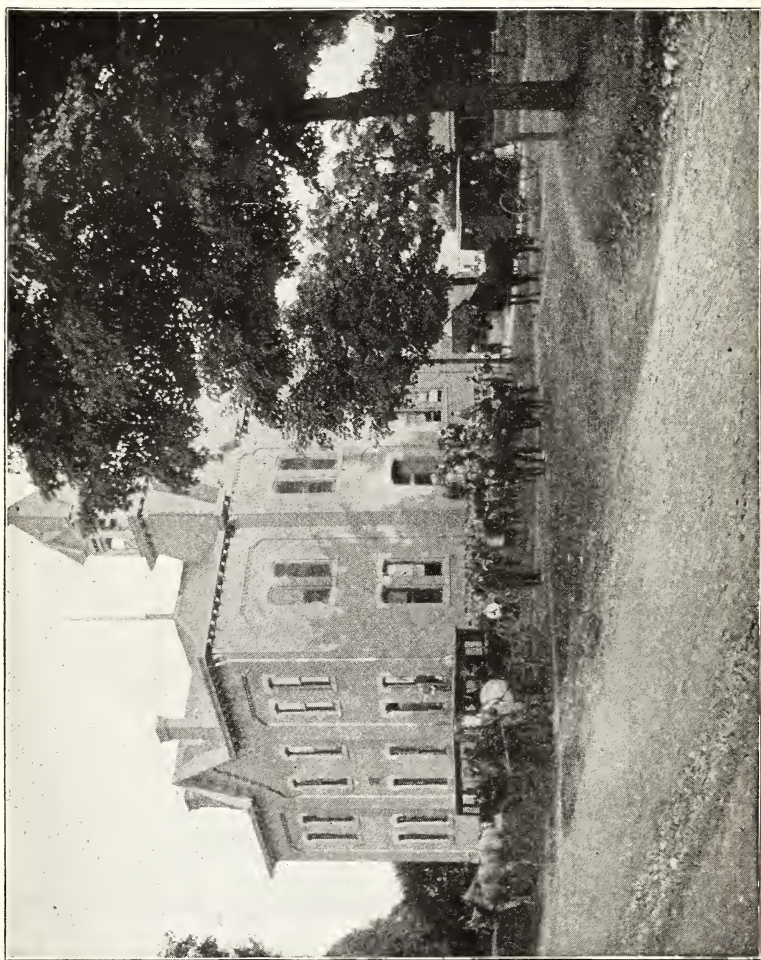


PLATE No. 1.—Central school building, Kingsville, Ashtabula County, Ohio.

The schools we visited in Lake and Ashtabula counties were village schools with the children brought to these villages from the outlying districts. In each case there was a saving of expense. Superintendent J. R. Adams, of Madison Township, Lake County, whose school we visited, says that "under the new plan the cost of tuition per pupil, on the basis of total enrollment, has been reduced from \$16 to \$10.48; on the basis of average daily attendance, from \$26.66 to \$16.07. The total expense will be about the same in this district as under the old plan, but the cost per pupil will be much less." This is easily explained when one understands that the school attendance has increased from 217 to 300 pupils since consolidation has been effected.

But we wished to find centralized schools in a purely country township, where there was no village or village school, a place where country life was being preserved. We went 35 miles south from Ashtabula and visited Gustavus and Green townships in Trumbull County. The first place visited was Gustavus. This township is exactly 5 miles square, as are all the townships of the Western Reserve with the exception of those along the shore of Lake Erie. In Gustavus Township the town hall is situated exactly in the center of the township, as is the case in Green Township. Here was a church, the post-office, a country store, and a few houses.

I had a picture of the centralized school of Gustavus Township and was anxious to see the real thing. We saw it and all was as represented. The school building is located in the center of the township. The school has been in operation two years. It is a four-room school, having a principal and three assistants. All the children of the township are brought to this central school and nine wagons are employed in the transportation. (See Plate No. 2.)

The wagons are provided with curtains, lap robes, soapstones, etc., for severe weather. The board of education exercise as much care in the selection of drivers as they do in teachers. The contract for each route is let out to the lowest responsible bidder, who is under bond to fulfill his obligations. The drivers are required to have the children on the school grounds at 8.45 a. m., which does away with tardiness, and to leave for home at 3.45 p. m. The wagons call at every farmhouse where there are school children, the children thus stepping into the wagons at the roadside and are set down upon the school grounds. There is no tramping through the snow and mud and the attendance is much increased and far more regular. With the children under the control of a responsible driver, there is no opportunity for vicious conversation or the terrorizing of the little ones by some bully as they trudge homeward through the snow and mud from the district school. The accompanying diagram (p. 167) is self-explanatory.

The average price per day per wagon is \$1.25 and the length of the longest route is $4\frac{1}{2}$ miles.

During the school year 1898-99 there were enrolled in the grades below the high school 82 boys and 52 girls; in the high-school room 17 boys and 35 girls; making a total in the building of 186 pupils. The average monthly enrollment for the entire school the past year was 163, while the average daily attendance was 77.4 per cent of the total enrollment. This is a fact of great significance. The children are regular and are getting the benefit of such a course.

Keep in mind that this school is not in a village and the children are scattered over 25 square miles of territory. The children are not tardy. How do they do it? you ask. Well, they do it and that is enough for me. Anyone who stands in that building, looks at those children and wagons, must be convinced that here is the solution of the country-school problem, because this problem is being solved in the country over 6 miles from the nearest railroad. There is an organ in every room and the walls are being decorated with pictures. They have started a library. In the high-school room were 52 enrolled, with 50 present. Here was an opportunity for the big boys on the farm to get higher education and still be

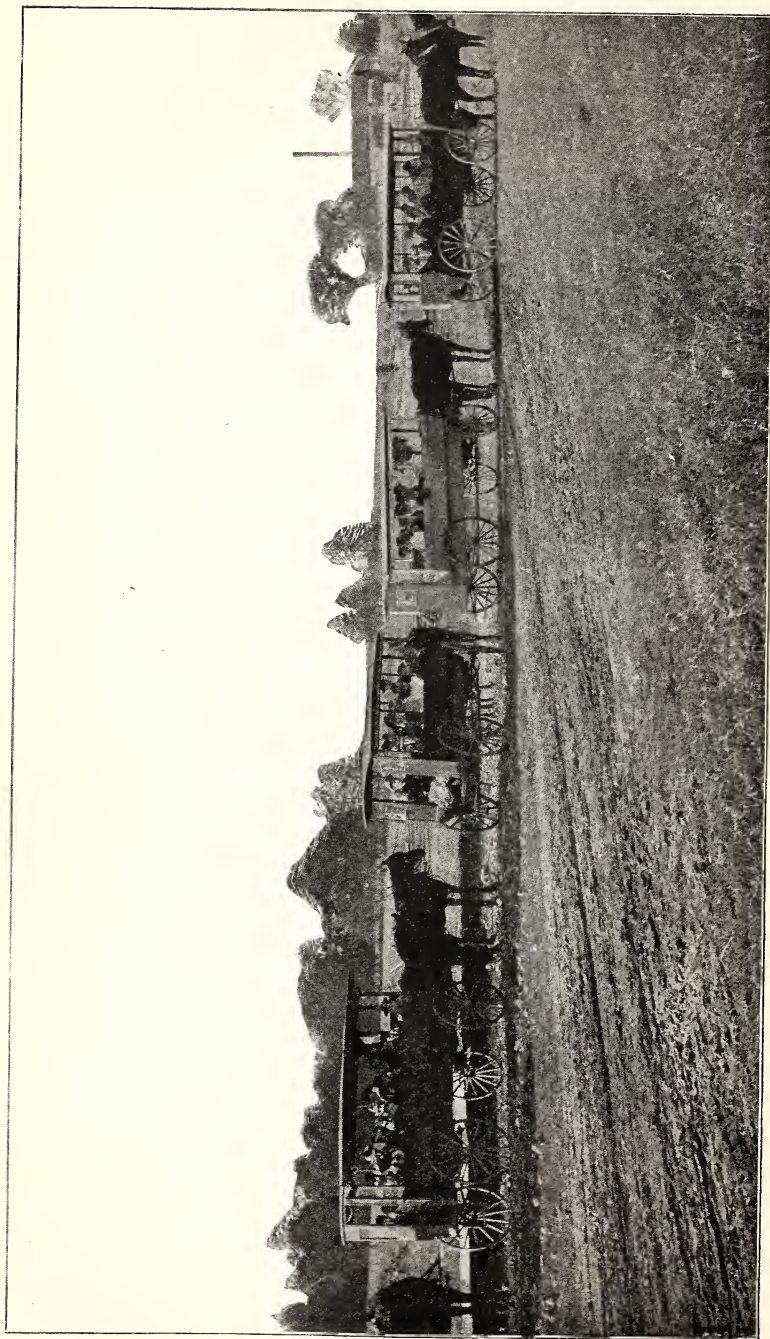


PLATE No. 2.—Wagons used in the transportation of children, Gustavus Township, Trumbull County, Ohio.

at home evenings secure from the temptations and dissipations of city life. They rode home in the wagons with the children of the lower rooms and thus were able to be of service on the farm.

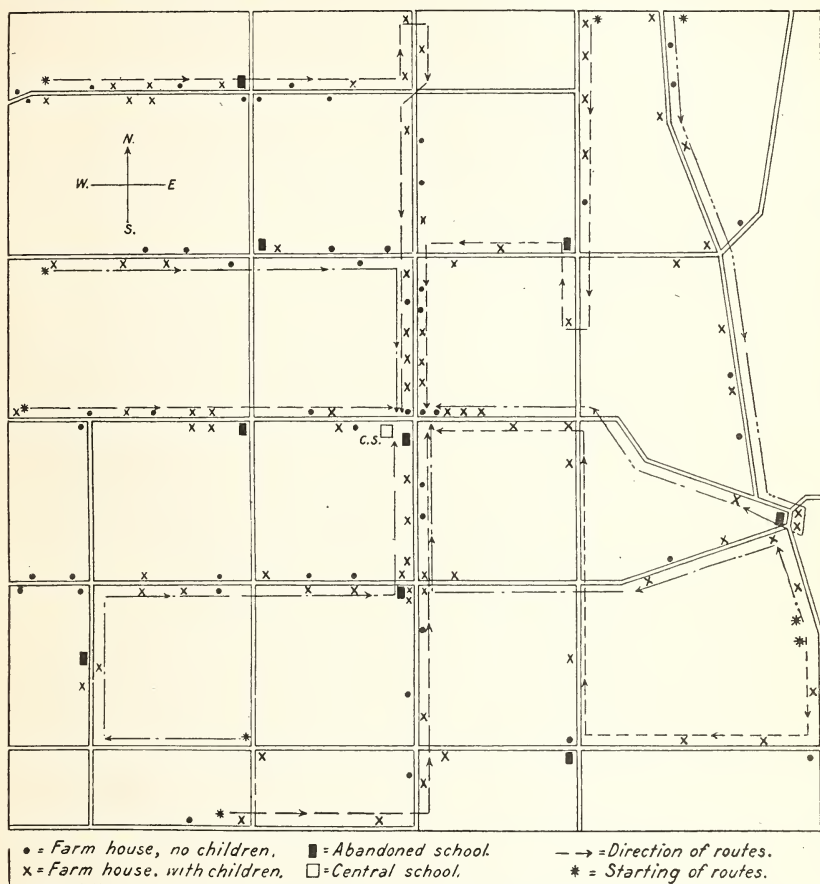


Diagram of Gustavus Township, Trumbull County, Ohio, showing transportation routes.

The building is a frame structure erected at a cost of \$3,000. It is heated by steam. The principal gets \$80 per month, while his assistants each receive \$27.50. The wages of the assistants should be larger. The drivers receive, respectively, \$22, \$30, \$18, \$25, \$30, \$32, \$16, \$30, and \$17 per month, making an average of \$1.25 per day. Before the adoption of the centralization the average daily attendance was 125 pupils. It has increased to 144 at the end of the second year, and the principal told us the attendance is increasing all the time. Before the schools were centralized the cost for the entire township was \$2,900. Now it is \$3,156, being an increase of only \$256 annually. And as to the character of the school, who will claim that the nine scattered schools were doing the work of a well-graded four-room school? There is absolutely no comparison. In order to keep up the school and pay off the school bonds the township board of education made a levy of 9 mills on a valuation of \$373,000. There was opposition to the plan at first. The people who were opposed simply took the ground that the thing had not been done and therefore could not be done—just as there are always people opposed to any progress. When I was a boy sensible people said a man was a

fool to think about binding grain by machinery. They were not ignorant; they were simply mistaken. So those who were opposed to centralization of schools frankly acknowledge their mistake and are found among the staunchest supporters. We have found this true at every place we have visited.

A special committee was sent from an adjoining county to investigate the Gustavus school. The committee was composed of one person opposed to the system and one in favor. They traveled over the township and talked with the people, as we did. In their report, out of 54 families interviewed, only one person with children was opposed; seven of those in favor were formerly strongly opposed, while none that were at first in favor of the system are now opposed. The same committee adds: "Although the system costs a little more (the belief is that it is cheaper after building is paid for) yet the people as a whole are highly pleased, and are very enthusiastic and proud of their schools. Several of the neighboring townships, after carefully watching the system, have decided to centralize, and the growing opinion is that centralization is in harmony with educational progress."

The committee's report is certainly correct. Bear in mind the roads in this township are but a trifle, if any, better than the average of Winnebago County. In fact, two or three townships of our county have, as a whole, better roads. The people are simply determined to have better schools, and will not allow obstacles to remain in the way of their children's fullest and freest development, even if it does cost a few hundred dollars more per year for the entire township. What would \$1,000 more per year on the \$373,000 valuation of Gustavus Township amount to? The average taxpayer would not know it. The testimony has been, that after the new school building has been paid for, there is an actual saving per capita of children of school age in the township. Then think of the superior value of the new school over the old. It can not be a question of a few hundred dollars.

While we were at the Gustavus school the principal advised us to drive 5 miles to the west into Green Township, where the people had centralized and put up a fine new brick building at a cost of over \$6,000. The people of Green Township had watched the school in Gustavus Township for two years and believed so thoroughly in the new plan that at the last April election they voted to centralize and bond the township for a long term to erect a new building. The vote was overwhelmingly in favor of the new school. We drove west to the center of Green Township, which is 5 miles square. This township is 11 miles from one railroad and 6 miles from another. So it is distinctively rural. To be sure, there is the townhall, a post-office, a church or two, a country store, and a few dwellings. That is New England brought to the Western Reserve. We all were enthusiastic over this building for country children. We never saw the like before in the country, to take the place of miserable box-car, 1-room structures. And the possibilities of such a school, who can measure it? (See plate 3.)

This building stands in the center of the township in a community distinctively country. There is no village, beyond a store and post-office, a townhall, a church or two, and a few dwellings. It is 11 miles from one railroad and 6 miles from another. It was built in 1900, at a cost of \$6,000. There are 6 schoolrooms, with 2 additional, 1 of which may serve as a library room and the other as an office and reception room. There is a basement under the entire building, part of which may be utilized for laboratory and gymnasium. The building is heated by steam.

To this building are brought all the children of the entire township. The educational influence of a building over that of eight or nine widely scattered neglected district buildings is beyond controversy, to say nothing of the sanitary improvement in the way of seating, lighting, heating, and ventilation. Such a building may be had in hundreds of townships of Illinois. It would not be a burden to the taxpayers of any township of Winnebago County. Bonds could be issued for thirty years' time; money could be borrowed at 4 per cent. The annual inter-

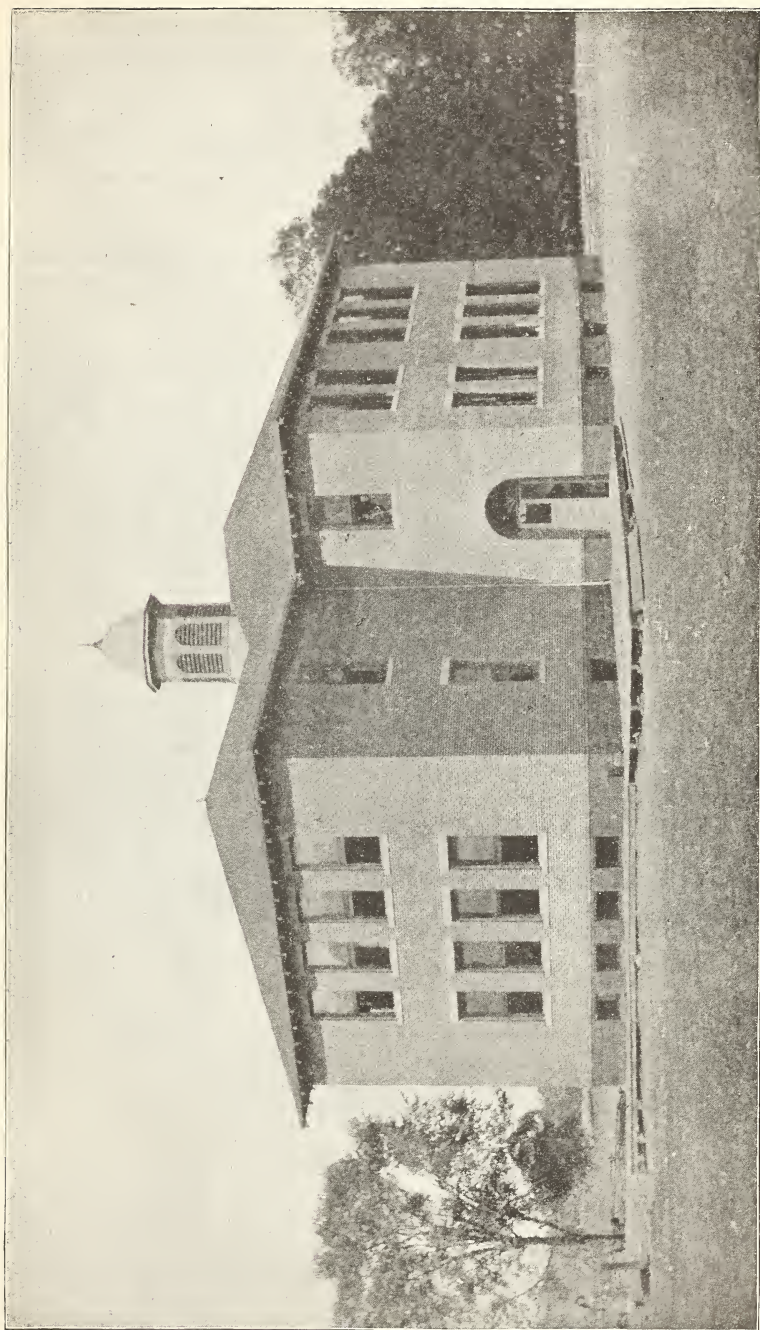


PLATE No. 3.—Central School, Green Township, Trumbull County, Ohio.

est on \$6,000 at 4 per cent would be \$240, an amount no larger than the repairs on seven or eight district schoolhouses from year to year if kept up as they should be. One-thirtieth of the principal, or \$200, plus the annual interest, \$240, would make a total cost of \$440 for building purposes for the first year, decreasing every year afterwards as bonds are paid off. The total valuation of Owen Township, according to the Winnebago County board of review for 1900, is, real estate, \$253,632, and personal, \$310,038, making a total valuation of \$563,660. An annual tax of \$440 for such a central building as here shown, on a valuation such as the township of Owen has, is cheaper in the long run than under the present plan.

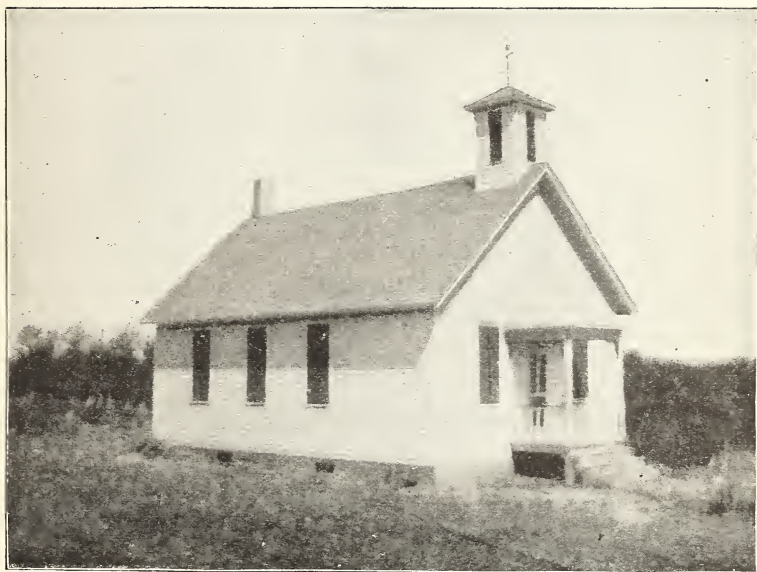
They began this school in September last. The enrollment is 180 over 150 of last year in the scattered schools. Four teachers are employed. All the children of the township are brought to the school and eight wagons are employed in the transportation. The campus has about three acres. Shade trees, school decoration, library, etc., will come. How that school can be made the social, literary, and musical center of the entire township. What an inspiration it must be to a corps of teachers to work in such a community as that.

In the primary room were all the little ones of the entire township in a beautiful room, while in the high-school room were many large farmer boys getting an education they could not otherwise obtain. On the playground all the big boys of the township play baseball. Think what it is to get all the boys of a township, country boys, I mean, on one playground. There will grow up a unity. Each boy, having studied and played with other boys of the entire township, will be stronger for it. When the football team or baseball team or literary contests of Green Township compete with Gustavus Township on athletic ground or in town-hall, each team will have the backing of an enthusiastic township. In a great many districts there are hardly enough boys to play "two-cornered cat." Can you wonder that children get tired of district school after a certain age? I am not sure that I have yet grasped the full significance of what we saw here. If that is good for Ohio boys, why not the same for Illinois?

The day spent at Gustavus and Green Township schools was by far the best one in the Western Reserve. As far as educational matters are concerned, it was far ahead of anything I had ever seen.

We returned to Ashtabula fully realizing that it was a good day, well worth our coming nearly 500 miles. Superintendent Bayliss and Mr. Black returned home from here. I paid a visit to Thompson Center, Geauga County. They did not have centralization, but the special district plan, a modification. It is not so good as centralization, but much better than the old way. They now wish they had complete centralization as in other townships, but the special district plan was the best they could do then. Certain sections of the township were jealous of the other, and after the most determined opposition those in favor of better schools at last, by a decree of the probate court, succeeded in getting two districts consolidated. A new schoolhouse was built, a graded school was organized with three teachers, and the children transported themselves. Now instead of nine small schools there are five on the special district plan. They expect to reduce the number.

On my return from Thompson Center I stopped at a district schoolhouse where the school had not yet been centralized. It was a small building, with no shade trees in the yard. On entering the house I found a teacher and four pupils. There were no more in the district. I asked the teacher why this school was not centralized. She replied that it would be next year. The teacher was getting \$30 a month to teach four pupils. She said that for the same money she would rather teach a room of 30 pupils in a graded school than to teach the four she had. Besides the possibility in the way of enrichment of country life which the centralized school promises, it also will bring better roads.



School building district No. 6, Durand Township, Winnebago County, Ill. Erected 1899. School directors: Messrs. Niles Patterson, Alfred Orth, and A. W. Goodrich.

At the Green Township central school, where the new \$6,000 brick building has been erected, I asked a high-school class how the roads were when they were bad. A young lady said they were real bad, while a young man said they sometimes found it necessary to put four horses to the wagon. The principal said the people were preparing to improve the principal roads over which the wagons ran. Thus better schools bring better roads. * * *

ADDENDUM.

This new school building (p. 171) was erected in 1899 at a cost of \$900. It is the best district school building in Winnebago County. Readers of this pamphlet are requested to contrast the above building with the central school building of Green Township, which represents the best of the new system in Ohio. The two buildings furnish some idea of the comparative cost of the two systems as far as buildings are concerned. Eight district school buildings, at \$900 apiece, is a total cost of \$7,200. The one in Green Township cost \$6,000. The new building in district No. 6 has a basement under the entire building and is heated with a furnace. The furnace cost \$75. Such a furnace (from personal observation) will easily heat a small dwelling of four rooms, and it is safe to say it could heat three schoolrooms of the size of the above building if properly arranged. It does not require very much calculation to prove that one large furnace in a central building is cheaper than furnaces or stoves in eight different buildings. Then the directors of district No. 6 were compelled to sink a well, at the cost of \$110. Now, one well at a central building is cheaper than a well at each of eight different buildings. And so on for many other items of expense. The above figures are facts and must appeal to every taxpayer. Please contrast the best of the old system with the best of the new as far as material equipment is concerned. A fair-minded person must come to the conclusion that centralization is the best system in every respect.

CONSOLIDATION OF SCHOOLS AND CONVEYANCE OF CHILDREN.

[Report made by G. T. Fletcher, agent of the Massachusetts State board of education.¹]

District schools fifty years ago.—The question of the consolidation of schools has for many years received the attention of educators. Conditions pertaining to changes in the population and the wealth of communities, as well as the increasing educational demands of the times, have rendered necessary a certain centralization of forces for economy and efficiency in school work. Fifty years ago a large percentage of the people of Massachusetts belonged to the "original stock" and lived in country towns. District schools were numerous and large. Seldom did a school register less than 25 pupils; not infrequently 75 were enrolled during the winter term, ranging in age from 4 years to 21. An attendance of 40 or 50 pupils was a common occurrence. Many of the schools were taught in winter by college students—often the brightest young men from the rural communities, whose example was a stimulus to the boys of the district to get an education. In the summer the teacher was often a young woman from the country academy, whose scholarship and character were an inspiration to the children. The district school was a center of interest and influence in the rural community. The range of studies was narrow, but the few branches then taught are regarded to-day as fundamental in a broader system of education. The independent thinking and the individual doing of pupils, whose age gave maturity to mind, were educating. The school was a "consolidation" of numbers and ability sufficient for the edu-

¹ 62 Mass. Rep. (1897-98), pp. 437-459.

cational needs of the times. Similar conditions exist in a few country towns now, and such schools may well be nurtured by town and State in the place of their native growth. A home life of frugality, simplicity, and industry is a potent factor in the upbuilding of body and mind. But there were many poor schools then, as there are now.

Changes that have come to the district schools.—Within the last fifty years great changes have been wrought in social life and conditions. The increase of population and wealth in centers of commerce and manufacturing is both a cause and a result of an exodus of the farming population to the cities and large towns.

In many rural communities farms were abandoned, or only the "old folks" left at home, to pass there the remnant of their days, while the farm constantly depreciated in value. The young, vigorous element of the population left home to work in store or factory. Families remaining in the "hill towns," or coming to them, had few children, and as a result the schools became small, the local interest in them often decreasing in the same ratio. These changes came in different degrees of severity to different towns. Those most favorably situated for farming purposes "held their own" to quite an extent, in adult population and wealth, but the number of children constantly lessened and the schools, though not generally reduced in number, were reduced greatly in attendance. Occasionally schools were united to increase the number of pupils, or a winter term was held at the center of the town for the older pupils of all the districts. Just when and where consolidation on a small scale began we can not tell. The cause and the fact of a beginning are both evident. There came to the people, slowly at first, a realization that the interest, economy, and efficiency that had in many cases characterized the large schools of former days were wanting. The struggle to retain the same number of schools as when the adult population was greater, the property valuation was twice as large, and the town had three times as many children of school age was as painfully evident then as it is now. The school had been the common center of interest, and the thought of its closing was a shock to the people. No wonder a deep-seated feeling existed, and still continues, that home interest and property valuation would suffer from the discontinuance of the local schools. * * *

Consolidation as seen by the State board of education.—In the report of Agent G. A. Walton to the State board of education, in 1889, consolidation of schools is recommended. In more recent reports of the board many facts and opinions, based upon observation and upon information received by the secretary and agents, may be found. Some of the reasons advanced by them for the consolidation of schools and the conveyance of children may be briefly stated in abridged form, as follows:

Diminished school population, rendering the schools small and expensive, making it difficult to secure competent teachers for the wages that can be paid.

The cost in some small schools of five pupils was \$50 per pupil, while in schools of 25 pupils the cost was only \$10 per capita.

Two essential things must be kept in view—efficiency and economy. To secure these there must be comfortable, convenient schoolhouses, necessary appliances, intelligent teaching, skilled supervision, and no more schools than are needed for the number of pupils.

In some towns two or more schools may be united, according to convenience of location. In others most of the outlying schools can be accommodated at the center by transportation of pupils.

In a few towns of large area, bad roads, and scattered population, little or no combination can be effected. In such cases the schools, small or large, must have such attention by the town, and if necessary such aid by the State, as will make them as good as possible.

One of the results that follow from consolidation is a better grading, a better classification of pupils, by placing them where they can work to the best advantage.

Consolidation gives a better opportunity for special instruction in music, draw-

ing, and nature study, and brings all the schools under closer oversight by the superintendent.

It insures better school buildings, appliances, and teaching force.

The money saved in a small town by reducing the number of teachers is often large enough to furnish better school accommodations to the children, better wages to better teachers, such transportation as consolidation requires, and longer schooling.

Objections to consolidation.—It must not be supposed that policies of consolidation are adopted without earnest discussion. In some cases the opposition has been so strong as to stave off favorable action for years. Among the reasons urged against consolidation the following may be cited:

Injury to the district by removal of the school.

Risk to the health of children because of long rides in cold and in stormy weather.

Association in carriages and during the long noon intermission at the schoolhouse.

Injury to health of cold dinners hastily eaten.

Long absence of young children from home.

It may be questioned whether the objection regarding injury to the property valuation of the district is a serious one. People having children to educate are not slow to see that educational advantages are not represented in their fullness and completeness by near schoolhouses. This property objection is well met in the replies to questions submitted to the towns, to which later reference will be made.

The objections to the risks of conveyance and of the noon intermission are of serious import, and can be met only by making transportation safe to health, manners, and morals, as well as comfortable, and by requiring the presence of a teacher at the noon intermission.

Are towns required by law to convey children?—Questions frequently come from parents to the secretary and agents of the board as to whether towns are required by law to convey their children to school. All that can be said in reply is substantially as follows:

1. It is made by law the duty of every town to "provide and maintain a sufficient number of schoolhouses, properly furnished and conveniently located, for the accommodation of all the children therein entitled to attend the public schools."

2. It is recognized everywhere throughout the State that a schoolhouse is conveniently located if it is within reasonable walking distance of its pupils, or if, the schoolhouse not being within such reasonable walking distance, the pupils are conveyed to it at public expense.

3. The law does not determine what a reasonable walking distance is; that must be decided by the school committee.

4. Whatever the school committee decides to regard as a reasonable distance for school children to walk, that is the distance they must walk. If a child within the compulsory age limits is not sent to school on the ground that the distance prescribed for him to walk is an unreasonable one, it is the legal duty, nevertheless, of his parent or guardian to send him to school, unless other legal provision is made for his education. Failure to do so, if adjudged by the courts to be a violation of law, is punishable by a fine.

5. It is the duty of the truant officers to follow up such violations of the law, and of the school committee to see that the officers whom it appoints for the purpose do their duty.

6. Chief Justice Shaw, speaking of the power of school committees in connection with certain general duties, where there is an absence of specific legislation, says (5 Cush., 207-209):

When this power is reasonably exercised, without being abused or perverted by colorable pretenses, the decision of the committee must be deemed conclusive.

7. The State board of education is given no authority to decide what a reasonable walking distance is.

Progress of consolidation.—The progress of consolidation through transportation for the last ten years is indicated by the tabulation of expenses, as given in the sixty-second report of the State board of education:

*Aggregate cost of conveyance for the State.*¹

Year.	Amount expended.	Year.	Amount expended.
1888-89.....	\$22, 118. 38	1893-94.....	\$63, 617. 68
1889-90.....	24, 145. 12	1894-95.....	76, 608. 29
1890-91.....	30, 648. 68	1895-96.....	91, 136. 11
1891-92.....	38, 726. 07	1896-97.....	105, 317. 13
1892-93.....	50, 590. 41	1897-98.....	123, 032. 41

Further consolidation needed.—Now that the law extends the minimum length of the school year to thirty-two weeks, some small towns will be obliged to reduce the number of schools in order to pay their teachers sufficient wages to make them eligible to the payment of \$3 a week to teachers of exceptional excellence from the school fund, as provided by a recent law. Quite a number of these towns are now paying over \$5 a year on \$1,000 valuation for school purposes, and they can hardly bear any heavier school expense. These towns and the State ought to cooperate to maintain good schools for all the children. * * *

Distances.—In Victoria the law provides that the following shall be deemed a reasonable excuse for nonattendance upon the public schools:

That there is no State school which the child can attend within a distance of 2 miles, measured according to the nearest road, from the residence of such child; excepting when the child is more than 9 years of age, then the distance shall be within $2\frac{1}{2}$ miles from the residence of such child, measured as aforesaid; and when the child is more than 12 years of age, then the distance shall be within 3 miles from the residence of such child, measured as aforesaid.

Victoria has eight times the area of Massachusetts, but only half the population. Nearly half of this population is rural.

The Massachusetts legislature has never made any requirement about the limit of distance beyond which children should be conveyed to school at public expense, except in a single instance. Chapter 541, Acts of 1898, provides that the town of Boxford may use the Barker Free School as a high school upon complying with certain conditions, one of which is that the town shall furnish free transportation to the school for pupils who live more than 2 miles away from it.

The following quotation is from the fifty-ninth annual report of Frank A. Hill, the present secretary:

The secretary, when asked his opinion about reasonable distances, inclines to the view of his predecessor—that little children should not be made to walk much over a mile, although older children of grammar-school age may walk a mile and a half, or even more. But numerous conditions may serve to modify this opinion. If for little children the mile lies through lonely, unfrequented, wooded, or difficult roads, it would be too great or too dangerous a distance for them to walk. If, on the other hand, the way lies over a well-traveled thoroughfare, with good sidewalks and houses all along the road, it would not be a hardship for the children to walk a considerably greater distance than 1 mile. Transportation should not be used to reduce sturdiness, self-reliance, and reasonable self-denial in boys and girls. It often has to be partial for some, while complete for others. In cases of genuine doubt, the leaning should be toward the convenience of the child.

* * * * *

Circulars of inquiry.—To secure as complete information as possible regarding

¹ In 1898-99 the amount expended was \$127,409; in 1899-1900, \$141,754.—ED.

the history, progress, means, and results of consolidation of schools and conveyance of children in Massachusetts, circulars containing inquiries regarding the different phases of the plan were sent to the school officials of all the cities and towns of the State. Nearly 200 replies have been received, representing conditions and practices in all sections of the Commonwealth, from the largest cities to the smallest towns.

When their gist is contained in a few similar words or sentences these replies are given only in percentages, or in a general way. Special facts, opinions, and suggestions are quoted as fully as space will allow. As the circular calls for information upon more than twenty different phases of the subject, it is not possible in the space allowed to this report to name the towns responding. The returned circulars are on file at the office of the secretary of the State board of education in Boston.

The circular of inquiry began with the following letter:

NORTHAMPTON, MASS., December —, 1898.

To the chairman of the school committee or the superintendent of schools of ———:

Many inquiries come to the State board of education, not only from our own towns and cities, but from those of other States, regarding the need, operation, and results of plans for the consolidation of schools and the conveyance of children that naturally accompanies such plans. That such inquiries may be answered fully and intelligently your cooperation is earnestly desired. Will you favor me, therefore, with such information about your own town's (city's) experience with consolidation and conveyance as is called for under the heads herewith given? Please forward your reply as soon as possible to—

G. T. FLETCHER,

Agent of the State Board of Education.

The inquiries are given in full, as follows, the answers to each inquiry being given in immediate connection with it and with various degrees of abridgment:

I. GENERAL CONDITIONS FAVORING OR REQUIRING CONSOLIDATION.

Changes in population, property valuation, etc., that have impaired the efficiency of your schools by reducing their size, increasing their cost, making it harder to get good teachers, etc.

More than 50 per cent of the towns report changes in population and property valuation in the towns as a whole, or in sections of them, that have affected the school conditions.

The following statements are samples of those coming from a large number of rural towns:

Attendance of pupils reduced; cost in a small school per pupil for a year, \$46.82; in the central building, \$16.30.

Difficult to retain good teachers.

Population diminished more than a half and property valuation more than a third since 1875.

Loss in population and property valuation makes it hard for us to meet increasing educational demands.

Good teachers command better wages than we can pay.

In one district that formerly had 60 to 80 pupils there are now 13. The farming population has disappeared.

Farming population once over 1,100; now only 605. Valuation reduced from \$375,000 to \$309,000.

Population reduced from 2,300 to 1,400 in thirty years; loss of \$70,000 in valuation in five years.

Farms abandoned; not children enough in any district to keep a school.

In many towns the loss in population and wealth is only in sections, usually in outlying districts, and so affects certain schools only. Many towns have gained in the villages as much as they have lost in the rural sections. Some towns and

all of the cities have gained in population and wealth; yet most of them in some quarters have had to deal with diminishing schools.

II. WHAT THE TOWN HAS DONE TOWARD CONSOLIDATING ITS SCHOOLS.

The number of schools that have been closed, whether the consolidation is partial or universal; whether it has gone on gradually or was brought about at one stroke; whether any children are sent to schools in adjoining towns or not; whether higher grades are taken to the high school building or not, etc.

More than 65 per cent of the towns and cities reporting have found it necessary or advantageous to close and consolidate some schools. Movements of population within town or city limits as well as the exodus of people from many towns have led to the closing of schools, but have not always involved the transportation of pupils.

Probably Quincy was the first town to act under the law of 1869, having closed two schools in 1874 and transported the children to other schools.

In the year 1893 Seymour Rockwell, the veteran school committeeman of Montague, said:

For eighteen years we have had the best attendance from the transported children; no more sickness among them and no accidents. The children like the plan exceedingly. We have saved the town at least \$600 a year. All these children now attend a well-equipped schoolhouse at the center. The schools are graded; everybody is converted to the plan. We encountered all the opposition found anywhere, but we asserted our sensible and legal rights and accomplished the work. I see no way of bringing the country schools up but to consolidate them, making them worth seeing; then the people will be more likely to do their duty by visiting them.

This statement indicates that consolidation of schools was heroically completed in Montague in 1875.

Consolidation was begun in Concord in 1879.

Prior to that time and for many years afterwards there was a rapid diminution of school population in the outlying districts. Of late the school population of these districts has increased. We attribute this to the willingness of young married people to settle on these farms, since transportation secures to their children educational opportunities as good as the town provides. Consolidation, begun as an experiment, was carried to completion at the desire of the population affected.

From another town came this suggestive statement:

Once when a man wished to sell his farm he advertised, "A school near." Now he advertises, "Children conveyed to good schools." Farms sell more readily now.

Other towns report as follows:

We have closed only one school, and that for two terms during the year, as the lot will revert to the former donor unless a school is kept in the building.

The scattered population renders consolidation undesirable in our town.

Planned at one time to close a school, owing to smallness of numbers, and convey the pupils to the next village. After consideration, decided that only an unwise parsimony on the part of the town could favor the project, and it was abandoned forever.

A few years ago the town tried to "double up" the schools and convey the pupils, but the people would not listen to the suggestion, mainly through ignorance.

Attempted to build a new schoolhouse and grade the schools, but bitter opposition upon the part of the older people defeated the plan.

We believe in closing the schools when it can be done.

Our rule is to keep a school as long as there are 10 pupils in it.

From one to ten schools have been closed in different towns. Consolidation is generally partial; in a few towns, complete. Most frequently it has been accomplished gradually; in some instances at "one stroke." In twenty-five instances pupils belonging to higher grades are taken to the high school building.

III. APPROPRIATIONS FOR CONVEYANCE.

Whether the town raises money for the purpose by a specific appropriation separate from the regular school appropriation or by making the regular school appropriation include transportation.

About 60 per cent of the towns reply, "By a specific appropriation separate from the regular school appropriation." Forty per cent, "Make the regular school appropriation include transportation." It seems evident that the law requiring towns to raise money for school purposes should include in the amount so raised whatever sum may be needed for transportation.

IV. DISTANCES.

(1) The conveyance of children, whether they are conveyed all the way to school or only a part of it; whether the carriage goes to the house in every case or some pupils have to meet it at designated points, etc.

More than 50 per cent of the towns report that they "convey all the way from the home to the school." Other towns say that unless the conveyance, carriage, or car passes their homes the children walk to the main street or to designated points or to the closed schoolhouse or to the streets through which the electric cars run, etc. In a few towns the carriage goes to every home in stormy weather to take and leave the children. In some towns conveyance is furnished only in winter or in stormy weather. In some cases children are conveyed to school, but not from it unless the weather is stormy or the traveling bad.

(2) The distance children are conveyed, whether they are fixed absolutely or approximately; what they are and what conditions determine them, etc.

Those who interpret this question to mean the distance within which children will not be transported to school at public expense make the distance from 1 mile to 2 miles. In one town small children will in some cases be conveyed to school if the distance from home is less than a mile. There seems to be no consensus of opinion regarding what is a "reasonable walking distance." Age, sex, and strength of pupils, nature of the road, the amount of money appropriated, and the disposition of the committee seem to be determining factors. It is the one difficult question which committees must settle for themselves, making such judicious provisions as will insure school attendance for all without undue hardship to any.

The majority of committees and superintendents understand the question to refer to the maximum distance of conveyance, and reply that they convey pupils "all the way from home to school" or "from the closed schoolhouse to the new one," or 2, 4, 6, or 8 miles, as the case may be.

(3) Questions of conveyance and distances, whether in deciding them young children are considered more than older ones; girls more than boys; the lower schools more than the high school; wooded, lonely, or difficult routes more than open, easy, and populous ones, etc.

Approximately 45 per cent of the towns report that they give equal consideration to young children of both sexes.

Ten per cent report that they give a preference to girls in their plans.

In 12 per cent of the responses the character of the routes was mentioned as an important factor in determining plans.

Thirty-two per cent make no discrimination as to children, schools, or routes.

V. PAYMENTS FOR CONVEYANCE.

Whether payments for conveyance service are made to the parents of the pupils or to persons hired for the purpose; whether they are made by the trip, the week, the term, or the year, with or without reference to the precise number carried, or in accordance with a fixed charge per pupil or a fixed rate per mile or some other system; with one or two illustrations of the amounts paid or rates fixed for definite services.

Payments are sometimes made to parents for the actual attendance of their children—so much per day a child, the teacher keeping a record. It is noticed in such cases that the attendance is very regular and that the children are able to walk most of the time. Payments are most frequently made to persons hired for the purpose, or in some towns and cities to steam and electric railroad companies. Illustrations:

One parent was paid 50 cents a trip for conveying his children 3 miles.

A parent carries his children for \$10 a term.

A parent transports his children 2 miles for \$15 a year.

The foregoing may be cases in each of which the father takes his children to school as he goes to his work.

Some parents carry the children of several neighbors with their own for a moderate sum.

Five cents a day for each pupil attending school.

Many pupils ride on electric cars at half fare, tickets being furnished by the school committee to be distributed by the teachers.

Carriages hired by the week: \$9 for transporting 12 children 2 miles; \$4 for transporting 4 children $1\frac{1}{2}$ miles.

Some make yearly payments as follows to persons hired for the purpose:

Seven pupils, 3 miles, for \$75; 29 pupils, $1\frac{1}{2}$ miles, for \$80; 11 pupils, $2\frac{1}{2}$ miles, for \$85; 7 pupils, 2 miles, for \$70.

Six hundred dollars a year, without regard to the number of pupils.

One school, one year, \$175; another school, one year, \$195.

Two hundred dollars and \$300 a year, without regard to number.

By the week for a certain number of pupils, one route, \$2.10; another and shorter route, \$1.30.

One route, \$5 a week; on a bad road, two children, \$6.25 a week.

VI. DETAILS OF TRANSPORTATION.

Persons who are charged with the duty of bargaining for and settling the details of transportation; the vehicles selected, whether covered or otherwise made comfortable; the drivers, whether selected with reference to their trustworthiness and fitness to care for children, etc.

In 43 per cent of the towns the school committee makes bargains and settles details; in 10 per cent, a subcommittee of the school committee; in 5 per cent, chairman of school committee; in 12 per cent, the superintendent of schools; in 4 per cent of the towns arrangements are made by the committee and the superintendent. In about half of the towns vehicles are covered and comfortable; in the others, not covered excepting in bad weather.

Nearly all of the drivers are reported to be "trustworthy." Some are said to be "as good as we can get." Some are of "doubtful qualifications." All committees and superintendents regard trustworthiness and fitness in the driver as of the highest importance. One committee says:

Only such persons should be employed as we would trust with the care of our own children.

A few committees say that they have to watch drivers of conveyances and hold them to strict account. Some complain that children are not under proper control

in the carriages; but, upon the whole, there seems to be a good degree of satisfaction with such vehicles and drivers as have been employed.

VII. ADVANTAGES OR DISADVANTAGES OF CONVEYING CHILDREN TO SCHOOL.

(1) *Effect, if any, on promoting attendance.*

The testimony upon this point is nearly unanimous that attendance is improved by conveyance of pupils. Some speak of the increase as very decided; a few say, "No effect."

(2) *Effect, if any, on health of children conveyed.*

A majority see "no effect upon health." A large number say, "Effect good;" and add that there is less exposure to rain, snow, cold weather, sloppy or muddy traveling; consequently, fewer colds. A few speak of the unfavorable effect of cold dinners hastily eaten. A few others say, "Not healthy." Much depends upon the vehicle and the driver.

(3) *Any trend toward needlessly short distance for conveyance or toward reduced self-reliance and sturdiness on the part of the children conveyed?*

The larger number of replies are to the effect that no such trend is noticeable, but about three-fourths as many replies are to the contrary effect. Comments:

Depends upon the firmness of the school committee.

We have a rule, and when parents and children know what it is, nothing more is said.

We meet all reasonable demands, then stand firm.

Pupils have so much done for them that they are not willing to do anything for themselves.

(4) *Effects as regards (a) the character of the school buildings and equipment, (b) the classification or grading of pupils, (c) the quality of the teachers and their work, (d) the efficiency of the pupils, and (e) the general spirit of the school.*

The larger number of towns report under (a) an improvement in the character of school buildings and equipment resulting from consolidation. Some say, "No effect yet." Under the remaining subdivisions of (4) there is a very marked accord that in all respects improvement is very evident.

A few comments:

Better ventilated rooms, hence more healthful.

Costs less for repairs; better janitor service.

Houses closed were in poor repair; good teachers would not remain in them.

Pupils better classified; 3 teachers do the work of 5 in ungraded school.

Too strict grading not beneficial.

Petty local jealousies lost in the larger school.

I question if the too closely graded school of 50 pupils reciting in one division is not inferior, from the pupil's standpoint, to the ungraded school of 20 pupils. Advantage of the ungraded school lies in the greater freedom of the individual pupil to advance at a rate best suited to him.

Pupils are more studious in the graded schools with only their classmates with whom they must compete.

Greater incentive and enthusiasm.

In the graded schools pupils lose the personal oversight of the teacher, which in small schools is of so great advantage.

(5) *Any further results, good or bad, to be expected from the extension of the consolidation policy?*

None but good.

Pupils become better acquainted with people, hence less bashful and awkward.

The time lost by the superintendent on the road is saved by consolidation of schools.

It becomes possible to give to all the pupils of the town the advantages of special teachers in drawing, music, etc.

Real estate men think it will reduce the value of their property in the rural districts.

Objection to having small children so long from home.

Our people would as soon think of having district churches as district schools.

Association with others whose lives are less restricted than their own is a gain in social graces.

Much is to be expected in moral influences, as conditions are better in the graded than in the ungraded schools. This is especially true as regards outbuildings or basements in their sanitary arrangements, and the oversight had in and about them.

Economy and efficiency.

I do not favor too great efforts to consolidate. Drivers are not and can not be expected to be men who can control children and hold their respect.

A compact neighborhood with a good school should be let alone.

(6) *The cost of the schools after consolidation, whether less or greater than before, or the same, and whether with poorer, equal, or better results.*

Sixty per cent of the towns report the cost as less, but the results as better; 15 per cent cost the same, but results better; 8 per cent cost more, but results better; 8 per cent cost more, but results not stated; 8 per cent cost less, but results not stated.

(7) *The public attitude toward the policy, whether one of approval or not.*

Reports of approval, in some cases of modified approval, are related to cases of strong opposition about as 70 per cent to 30 per cent. Comments:

At first opposed; later approved.

Those favored by the plan approve it; those not, oppose it.

Sanctioned when committee advocated it.

Opposed to extension of policy.

No "public attitude" here.

The policy is never questioned.

Opposed.

Toleration.

VIII. CONSOLIDATION NOT DESIRABLE OR FEASIBLE.

(1) *Any large rural schools—schools of 25 to 40 pupils—that probably would not be helped by processes of consolidation?*

More than half the replies indicate that there are rural schools that would not be helped by consolidation. Several towns report having one or more rural schools with an attendance of 20 or 40 pupils. Some special replies:

Distance and size render transportation difficult and expensive.

Retain such schools if good teachers can be secured.

Would not consolidate a school of over 20 pupils.

One school 6 miles from the center.

We have a large rural school of 50 pupils with two teachers.

I would prefer that a child of mine should be educated, up to the high school grade, in a school of 30 pupils under a superior teacher rather than in the ordinary graded school with the average classroom instruction. I think there is a tendency to grade too much. In a well-organized and conducted ungraded school there is an unconscious review all the time and an anticipation of what is to come. The whole is there and the part in relation to the whole.

A good district school, with 25 pupils and an efficient teacher, can be made equal to any closely graded school, and better than most of them.

Consolidation has disadvantages as well as advantages.

Thirty towns report that consolidation would help all of their ungraded schools; it would provide better houses, appliances, teachers, and superintendence at equal or less expense.

(2) *Conditions that largely or wholly forbid consolidation.*

About 50 towns mention objections of varying degrees of seriousness that have been urged against consolidation:

- Too long distances; bad roads, blocked in winter for weeks.
- Pupils too young to ride long distances.
- Lack of money to pay the expense of suitable transportation.
- Strong opposition of the people to the machine-like system of conveyance of pupils.
- Saloon at the center; can not have a schoolhouse near.
- Invasion of individual rights.
- Belief of farmers that closing rural schools reduces the value of their property.
- Willingness of village people to allow those in the outlying districts to have their own way. "Ephraim is joined to his idols; let him alone."
- Not room enough in the center buildings for more pupils.

IX. MISCELLANEOUS.

Any facts about consolidation and conveyance in your town not directly called for under the foregoing heads, or any brief statements about school conditions that need improving but can not be met by schemes of consolidation?

Illustrations of replies:

The greatest need is money to pay higher salaries to teachers. Must be more State aid.

All possible consolidation of schools, also skilled superintendence, should be made compulsory.

We encourage higher grades to go to the center.

All high school studies should be eliminated from upper rooms, that grammar-grade work may be better done.

If let alone, we are well enough. Too much disposition to make our schools large and expensive.

Consolidation should be carried far enough to warrant three rooms and three teachers below the high school.

Partial consolidation under some conditions would seem to be feasible and desirable. (1) As of adjacent districts far from the center but not very distant from each other, a team between the two buildings, placing the younger children of both districts in one of these buildings, and the older children in the other. (2) If new outlying buildings are constructed, make them two-room buildings, on the dividing line of two or more districts. Collect pupils by transportation of those farthest away.

Various ways and means of improving the schools are suggested in the replies received. Approval and disapproval of theories and practices are freely given. Results are stated. On the whole, the smaller schools of Massachusetts are gaining through consolidation; they may be made more efficient by an earnest determination of the people that they shall be more efficient; but mutual concessions and hearty cooperation are essential to that end. * * *

Conclusion.—While the weight of opinion is decidedly in favor of consolidation of schools, as being in the line of economy and efficiency, there are strong arguments in favor of the fair-sized, well-organized, thoroughly taught ungraded school. Small, isolated rural schools must exist in some towns of the State for years to come. The children are not responsible for the unfavorable conditions in which they are placed, and they are morally and legally entitled to a good education. Some of these schools are taught by women of rich culture, and of large previous experience in other educational fields. They are now "home talent" because of the love and care needed by aged parents. The teaching and the character-building in these little schools are of rare value. There are other teachers of exceptional abilities who will for a reasonable compensation do needed work in communities thus situated. The State is in duty bound to aid the town in securing to every child good educational advantages. If such influences of frugality and industry as characterized the home life in the country in former days can be

kept up and supplemented by excellent teaching, these isolated rural schools may do good work, even if they are denied the advantages of consolidation.

FURTHER INFORMATION AS TO MASSACHUSETTS—EXPERIENCE OF THE TOWN OF WARWICK.¹

There has been some extension of this plan during the year in towns more or less favorably situated for conveyance of children. These conditions should always be taken into careful consideration: The size and distance of schools from some central location, and the possibility of securing conveyance that is commodious and comfortable, affording adequate protection to children in all kinds of weather. Such conveyances, if not steam or electric cars, should be drawn by good, safe horses, under the charge of competent drivers, who are persons of good manners and sound moral character. It is the duty and the right of parents to demand comfort and protection for their children in the public conveyance to and from school. Provision should also be made for the care of children during the noon hour at the union school.

Consolidation of schools has not only its advantages, but its difficulties as well. Perhaps no other rural town in western Massachusetts better illustrates changed conditions through consolidation of schools than Warwick, in Franklin County.

Six years ago Warwick maintained 9 schools twenty-four weeks per year. The average attendance of pupils in the town was 87. Teachers' wages in the 8 outside schools were \$5 per week; in the center school, \$6 per week. With few exceptions, the teachers were young and without experience, educated in the district schools. Some were under 16 years of age, one term a pupil in a school, the next term a teacher. Occasionally, in recent years, a teacher of marked ability and successful experience has been employed, but the number of schools made it impossible to pay wages that would retain the services of well-qualified teachers many terms. The schools were poorly supplied with books and materials.

Now all of the pupils in town are in three rooms of one modern, well-lighted, heated, ventilated building, pleasantly situated in the center of the town. The rooms are supplied with good blackboards and with books and appliances for the use of pupils. The school has three teachers,—normal-school graduates of exceptional ability. The average wage paid is \$9 a week; the school year is thirty-six weeks. Special teachers of music and drawing visit the schools each week. Pupils are conveyed to the center union school from distant parts of the town. The average attendance in the fall term was 96, a gain over the attendance in all of the 9 schools six years ago. The schools are well graded from lowest primary to highest grammar grade, three classes in a room. Teachers are selected whose qualifications are especially adapted to the ability and needs of the pupils under their charge. The number of recitations being less than in ungraded schools, the teachers and pupils do much more effective work. The relation of the teachers to one another is one of mutual helpfulness, and the association of so many pupils in the schoolrooms and on the grounds under the supervision of the teachers is pleasant and beneficial.

As a result of the consolidation of its schools and a wise administration of school affairs, the town has in six years lengthened the school year 50 per cent, increased the teachers' wages 75 per cent, and employed special teachers of music and drawing without materially increasing the school tax of the town. Because of the reduction of the number of schools through consolidation, the cost of instruction by the regular teachers has been lessened. A large increase in the amount of money received from the income of the State school fund has been of great benefit to the schools.

¹ 64 Mass. Rep. (1899-1900), pp. 392-394.

Much time that would be needed for travel by the superintendent and special teachers in reaching many small scattered schools is saved for profitable use in the one building of the union school.

The citizens of Warwick have manifested a deep interest in their public schools by the employment of an efficient superintendent, the erection of a school building which is a credit to the town, the consolidation of its schools, and the employment of efficient teachers.

TRANSPORTATION OF PUPILS IN INDIANA.¹

[By State Supt. FRANK L. JONES.]

* * * Twenty years ago public education in rural communities was conducted upon a curriculum composed largely of the common branches. The teaching of physical geography and algebra in addition to the common branches was not uncommon, though it was not general. Great credit was given a township for its progressiveness and advancement. High schools were not established except in the larger cities. Young men and young women attended the rural schools until they were 21 years of age, and repeated annually the work of the advanced grades, thus often filling those schools with as many as 75 pupils under the direction of a single teacher whose business often degenerated into "keeping order." We need not turn to the statistical files of the department to prove that the large rural school was the rule and not the exception, such a condition being within the recollection of all mature people.

In the decade 1870-1880 the average number enrolled in each school district was 54. During the next two decades a constant decrease in the average is reported. The whole time of prominent educators was given to the rural common school. The favorite expression of one of Indiana's foremost State superintendents, in both oral and written statement, was, "Establish a rural school at every crossroads." This stimulus to rural schoolhouse construction multiplied those schools unduly, and many of them need to be abandoned at this time. With the development of the course of study, the grading of schools, the introduction of new methods of teaching, and the growth of high schools, the young men and young women were sent to the new secondary schools in the villages, thus relieving the common school of many of its students. Furthermore, the growth of cities demanding and attracting laborers thereto, and the demand for fewer laborers on the farm upon the introduction of improved machinery, reduced the number of young, vigorous, family-producing men and women in the country. Again, it is argued that there are not many large families of children in the country as in former years, and it is not difficult to prove that such is true. An examination of a large number of school registers throughout the State during the last eighteen months shows in very few instances more than two pupils from one family, and in only one instance were there as many as four pupils enrolled from a single home. Two decades ago the school registers often contained the names of five or six pupils from one home, and it was not as uncommon to find two or more enrolled from a home as it was to find only one. All of these conditions and movements have led not only to a lessening of rural school attendance, but have, in many cases, left so few pupils that we can not maintain with profit, either financial or social, a great many of these schools. The great evil of the small rural school lies in its nonsocial character. It is wholly unable to furnish each of its pupils that educative influence that comes from association with many of the same age and same degree of advancement; it can not have, in many classes, enough of honest and helpful

¹ Ind. Sch. Rep., 1900, pp. 520-558.

competition to establish a standard to which many a bright pupil would raise himself, and fails therefore to bring from him that supreme effort which develops and ennobles and which comes only from a vigorous contest with his fellows. The humdrum and monotony of a recitation in a one-pupil class is discouraging to both pupil and teacher. Not only is the mental work of the school thus impaired, but the lack of enough pupils to organize a game on the schoolhouse yard prevents adequate exercise and tends to make morbid, selfish, and pessimistic all who live in its atmosphere—the deadly quiet and inactivity of the small school kills the spirit. * * *

The per capita cost in these small schools is not only much too large, but is continually increasing. In 1879 the cost of education per capita was as follows:

In townships	\$6.21
In towns	5.21
In cities	7.48

In 1899, twenty years later, the cost was:

In townships (per capita)	\$10.50
In towns (per capita)	11.10
In cities (per capita)	7.07

These tables are of more than usual interest on this point, and present to the taxpayer a strong argument for a solution of the problem of the small school. It will be observed at once that the per capita cost of education is constantly increasing in the country and towns and decreasing in the cities. This condition in the rural school arises wholly from the prevalence of small schools. There were as many rural schools in 1899 as in 1879; the salaries in the former are not substantially different from those in the latter; the investments in schoolhouses and appliances would about equal, but the attendance in them has constantly decreased. This condition makes necessary an expenditure for teachers, fuel, apparatus, and repairs for the small school of to-day equal to that of the large one of two decades ago. In the towns the increase is due quite largely to the establishment and equipment of high schools of small enrollment. Nearly all cities show congested schools, making necessary many pupils under the direction of each teacher, thus reducing the per capita cost. Add to this a saving in fuel, repairs, buildings, and appliances, and the reduced cost of education in cities is explained. * * *

The small schools are more numerous than most citizens and schoolmen know. That there are within the State 108 schools with fewer than 5 in average daily attendance; 487 schools with fewer than 10 in attendance; 1,253 schools with fewer than 15 in attendance; 2,332 schools with fewer than 20 in attendance, making in all (including counties not officially reporting) more than 4,200 schools in each of which there is an attendance too small for vigorous and highly profitable work, is a matter of no little importance, either educational, social, or financial. At the average rate of wages paid rural teachers, and for the legal minimum term of six months, the cost of instruction alone in 108 schools is \$48 per capita; in 487 schools, \$34 per capita; in 1,253 schools, \$16 per capita; in 2,332 schools, \$12 per capita. This calculation does not take account of the building improvements, cost of fuel, janitor service, repairs, and apparatus. These items added to the cost already given would increase the amount considerably. * * *

No school can claim good conditions for work if it contain fewer than 25 pupils; nevertheless, one-half of the rural schools of Indiana are in operation with numbers ranging from 3 to 25 pupils in average daily attendance.

The problem of the small school, therefore, is a real one, and each year becomes increasingly difficult. It is pressing itself more and more upon our attention and now requires a solution. In these schools we must lessen the cost; we must enlarge the classes; we must improve the school socially and athletically. The question now arises, How shall we proceed to accomplish this much-needed reform?

Upon one proposition we must all agree at once, namely, that our pupils must be collected into larger groups. We know that this means the abandonment of many schoolhouses, consolidation of the schools, longer distances to school, and the transportation of pupils. It means the abandonment of the traditional "home school." It does not matter how much we deplore the condition which makes consolidation of schools necessary, the fact remains that it is the only rational solution of the question that has been offered. Before entering upon the details of the problem of consolidation and transportation it might be well to say that the thing most to be avoided is the destruction of rural life and the rural view. The very strong movement which leads to the centralizing of schools in towns and cities is to be deplored and should be avoided if possible. The preservation of the conservatism of the farm; the simplicity of its manners and dress; the ruggedness of its life; the peace, quiet, and contentment of its homes; its formation of good habits; its absence of vice; its opportunities for physical development, and its making of men and women of clear consciences are items which argue eloquently for rural life and make its preservation of vital necessity to the welfare of our nation. It must not be required that the problem be solved by consolidating about the towns, but that consolidation which is distinctly rural is expedient, economical, and wise. Some of the best graded schools in the State are at a great distance from either cities, towns, or villages. * * *

WHAT INDIANA IS DOING IN THE TRANSPORTATION OF PUPILS.

In July, 1900, the superintendent of public instruction in Indiana sent to the county superintendents the following inquiries, and below may be found their answers, all of which gives in detail the status of the work in Indiana. Forty counties have already begun the work of collecting pupils into larger groups by transporting them.

QUESTIONS.

1. *What is the sentiment among your trustees relative to abandoning small schools and consolidating the schools of the townships?*
2. *In what townships of your county has consolidation been tried, and with what effects?*
3. *What do you find to be the advantages and the disadvantages of the system, if you have tried it?*
4. *What do the patrons think of the plan where it has been tried?*
5. *How far do you transport pupils?*
6. *Give briefly the history of any one experiment in the transportation of pupils.*
7. *General remarks.*

The answers received were as follows:

ANSWERS.

Adams County:

1. They have talked the matter over at different times. They came to the conclusion that bad roads in Adams County will be a great drawback. I believe the idea of consolidation is a good one, and am anxious to have it tried here. At present the sentiment of trustees is somewhat against it from the standpoint of bad roads.

2, 3, 4, 5, 6, and 7. No answer.

Allen County:

1. We have not discussed this subject in any of our board meetings, but I am sure that a majority of the trustees feel that we are not yet ready to vacate very many of our schools. Transportation depends so largely upon the condition of roads that in many places this is not yet feasible.

2. Wayne Township, Allen County, has transported children for two years in one district. It is a case in which a small school of about 20 pupils was closed and the children transported to an adjoining school, a distance of 2 miles. I asked the teacher to make a separate report of their attendance. It proved to be 10 per cent better than that of those not transported.

3. Our experience is too limited to allow a valuable opinion. It seems to improve attendance, prevents tardiness. The pupils are much less exposed to the inclemencies of the weather, being in closed rigs, which are heated in severe weather. The saving amounts to about \$1 per day.

4. They are pleased.

5. Two miles.

6. No answer.

7. I am of opinion that there is danger in the system when carried too far. One township grade school large enough to accommodate all the children in a township, in my judgment, will embrace too much territory and contain too many pupils for the best results.

Bartholomew County:

1. Generally in favor of continuing local schools as long as a reasonable number of pupils support the school.

2. Transportation has been tried in 1 township only, Columbus Township, with very satisfactory results.

3. Pupils of 1 school district transported to an adjoining school district. Advantages: (a) Better teaching; (b) satisfied pupils; (c) satisfied parents; (d) satisfied school officials; (e) net saving of about \$35 per month.

4. See No. 3.

5. About 3 miles.

6. Experiment referred to in No. 3 has been in operation for the last two years, with results as indicated.

7. Personally we believe that local schools should be continued so long as enough pupils attend to keep up a reasonable interest in the school. (The public school as the local institutional unit is the hope of our country.) After that, consolidation.

Benton County:

1. Our trustees all favor it.

2. Bolivar, Pine, and York townships, with good effects.

3. The advantages are that it gives the pupils of the smaller schools better opportunities for classification, gradation, and instruction, and financially is a saving of fully 50 per cent of the amount it would cost to keep open the schools that are closed.

4. The sentiment for and against the plan is about equally divided.

5. From $2\frac{1}{2}$ to $3\frac{1}{4}$ miles.

6. One school that has been closed for three years formerly cost the township about \$50 per month, or \$400 for a term of eight months, the usual length of schools in that township. The schoolhouse has been sold and the pupils have been transported to other schools for \$25 per month.

7. It is very difficult to get the consent of the parents to close schools.

Blackford County:

1. Favorable to it.

2. Licking Township. Good effect.

3. Avoiding dead schools, as all small schools are apt to be, and a financial saving of \$150 per year.

4. Satisfied.

5. Two and one-half miles the farthest.

6 and 7. No answer.

Boone County:

1. I think the sentiment among trustees favors the change mentioned.

2. In none.

3. The county has no examples.

4. Have not tried it. The patrons strenuously oppose its inauguration.

5 and 6. No answer.

7. The trustees have so far allowed the patrons' opposition to prevent the abandonment and consolidation of schools. The township reform law tends to weaken the purpose of the best and most enterprising trustees.

Carroll County:

1. It is the prevailing opinion among the trustees of this county that small schools—those with an enrollment of 10 to 15—should be abandoned. They also think that much better school work could be done at less expense by consolidating all the schools of the township. I think they are in favor of it only where a graded school is already established near the center of the township and where the roads are good.

2. Transportation has not been tried at public expense at all. In Jackson Township several families take their children to Flora and Camden at their own expense, and some other families are paid something by the township. In these instances the children do not wish to go again to the country nor do the parents desire a change.

3. In the cases under "2" there is a financial gain of about \$500, as 2 schools were abandoned.

Pupils transferred to Flora cost about \$75. I should say there is a gain of \$400. The advantage of the graded school over the country schools can not be estimated. It is severe on these children to make the drive on the extremely cold days. They don't complain much, however.

4. They are in every instance well pleased.

5. From 2 to 4 miles.

6. A school meeting was held in a certain district to see whether the plan would be acceptable. Patrons came prejudiced, thinking we were going to rob them of their school and build up the school at Camden. They were almost unanimously against us. We set forth the plan, but they raised all forms of objections and never would submit. Some now come to Camden at their own expense and are well pleased.

7. Good roads would make it practicable. The results would be incalculable in the way of better training for the children. It would be a great money saving, I think.

Cass County:

1. I think that there will be at least 4 schools abandoned this year. The trustees are nearly all favorable, but there is some opposition among the patrons. It has never been tried in Cass County.

2, 3, 4, 5, 6, and 7. No answer.

Clay County:

1. The sentiment is gradually growing in this county. It is limited, however, to abandoning the small schools.

2. None have tried it.

3, 4, 5, and 6. No answer.

7. In many townships the relocating of schoolhouses would lead to a saving of 1 or 2 schools in each township so adjusted. At this time the above seems to be the need along the line of abandoning schools in this county.

Clark County:

1. They are generally in favor of it.

2. Charlestown Township. Good effects.

3. Advantages: Pupils have the advantage of a longer term of school, a better graded school, and usually (not always) of a better teacher. It is also a financial saving. Under very unfavorable conditions it saved this township \$75. Disadvantages: It has a tendency to make less attractive and inviting the life of rural people by destroying their schools.

4. They are in favor of it.

5. Two, 3, and 4 miles.

6. One school abandoned in Charlestown Township and 5 pupils transported to town of Charlestown. Patrons pleased; pupils in a better school. Other township schools run longer. Saving to township that transported

7. No answer.

Clinton County:

1. Most of them are in favor of it, but only where the roads are good; the schools to be abandoned are small, and all conditions favorable. I found 3 schools this year with an attendance of 6 pupils. I shall recommend to the trustees that these schools be abandoned.

2. Owen, Perry, and Ross townships, with very good results. In the first two, hacks were furnished. In Ross Township the trustee paid the parents to furnish conveyance for their children. The latter plan seems to give the better satisfaction, as the children can bundle up and start at once directly from home.

3. Advantages: (1) Better school. There are more incentives to study and more rivalry among pupils in a class of 8 or 10 than in a class of 1, and usually the good teacher is selected for the larger school, while "any one" can teach a small school. (2) A saving financially. Counting interest on the investment, the transportation will cost no more than the running expenses of the school, exclusive of the teacher's salary. Thus a saving of from \$1.65 to \$2.50 per day.

4. I have found no serious objections to the plan. Some complaint has been made that the children are exposed too much in bad weather. But in the face of this a few families are sending their children away from a district school (within three-fourths of a mile) to a graded school nearly 4 miles away.

5. From $2\frac{1}{2}$ to 4 miles.

6. A hack from Colfax made the trip morning and evening, taking the pupils of a small district 2 miles north of Colfax to another small school 4 miles north of Colfax, thus combining 2 small schools. Last year the trustee allowed the patrons of the school 2 miles north of Colfax to send to either of the other schools, and he paid their transportation, the patron furnishing his own conveyance. This plan seems to be preferable.

7. This is a good plan in some cases; but I believe it will be a long time before the sentiment in favor of the crossroads schoolhouses changes. When the roads are good and the school is small, or the pupils want high-school privileges, the plan is all right. But I seriously doubt whether a radical change to this system would bring about generally good results.

Decatur County:

1. There is no active interest manifested. Mr. O. B. Trimble, of Clay Township, thinks the plan a good one, and would attempt it if he had time to complete the work. Mr. C. C. Lowe is also an advocate of the plan, but his township is so arranged that it is impracticable. Roads run to Greensburg, with very few convenient crossroads. To consolidate schools would require exceedingly long drives. Other trustees have had no special interest in a general plan of "consolidation."

2. In Fugit Township 1 school was abandoned in 1898-99. Pupils were transported, but the country school is opened again this year.

Clay Township abandoned 2 schools in 1898-99, and 2 in 1899-1900. No transportation was needed except in 1 school this last year. It was offered there, but not accepted.

In Adams and Jackson townships each 1 school abandoned, 1898-99. No transportation needed.

Clinton Township abandoned 1 school 1899-1900, and provided transportation for from 6 to 10 pupils.

(These conditions remain at present as stated above.)

3. It has not been sufficiently tried to give fair basis for judgment.

4. There is quite a general feeling among patrons of rural communities that they are entitled to school privileges at home. In communities where schools are small the people are scattered over considerable territory. Pupils would have to walk, in some cases, about as far to the transportation wagon as they now have to walk to school. In two or three of the cases above cited opposition was strong. There is a general anxiety, however, on the part of trustees to close the smaller schools.

5. In Fugit Township, from 2 to 3 miles. In the proposed plan for Clay Township, from 3 to 4 miles. In Clinton Township, about 3 miles.

6. No answer.

7. I think the best plan here would be a gradual development of the system in two or three townships. Small schools in a few cases could be transported to others without overcrowding. In three or four townships a partial consolidation could be easily put into effect. The condition of roads has been a hindrance to even fair consideration of the plan; but three townships now have petitions filed for extensive "pike" systems.

Crawford County:

1. Consolidation of schools has never been tried in this county. Two trustees have abandoned a district each and the pupils enter the nearest adjoining district without transportation.

The idea is considered a good one, but not practicable in this county, owing to poor roads and so many hills and small farms.

2, 3, 4, 5, and 6. No answer.

7. I believe if Crawford County could have good graveled roads, which I think she will have before long, the solution would be solved in this county.

DeKalb County:

1. As far as I am able to learn they favor it. I think they would favor it were it not for the expense of building new houses.

2. It has not been tried, though it has been talked of quite favorably in a few instances. The sentiment is growing in favor.

3. Not tried.

4, 5, and 6. No answer.

7. It seems to me that we are rapidly approaching the concentration plan.

Delaware County:

1. The sentiment is universally in favor of consolidation of small schools. There is not a dissenting voice in Delaware County among the trustees. The only question to be determined is how fast to push the plan in face of some opposition among some few patrons who are content to let matters rest where we now have them.

2. In Hamilton and Perry townships, with the best results claimed for the change. Some economy, regularity in attendance, better attendance, better health of pupils, better gradation and classification.

3. Better gradation and classification, better teaching, better attendance among those conveyed, better health of children, due to care in getting to and from the school. Saving of money where two schools can be changed.

Three hundred dollars in 1 township, 1 school abandoned.

Three hundred dollars in another township, 1 school abandoned.

Six hundred dollars in another township, 2 schools abandoned.

In the townships where there is some conveyance the saving in teacher must be applied to conveyance. Where the two schools are conveyed the saving is 25 cents per day.

4. The plan seems to give entire satisfaction thus far.

5. Some are transported from 4 to 5 miles.

6. Two schools abandoned in Hamilton Township and children conveyed. Pupils in each school, 10. Cost of transportation, \$1 and \$1.10 per wagon. Cost of teacher under old plan, \$2.25 each. One additional teacher required at the consolidating point. Number of departments, 3.

Township high school possible. Satisfaction given, good. Sentiment in township, very favorable. Excellent prospects for the future.

7. No answer.

Dubois County:

1. They favor it, but citizens oppose it to such an extent that no trustee in this county is likely to move hastily in the matter.

2. None.

3, 4, 5, 6, and 7. No answer.

Fayette County:

1. The trustees are favorable to the above-named plan.

2. In only 1 township, Harrison. The patrons of 2 of the schools abandoned were very strong against it at first, but most of them are now satisfied and like the plan. If they had school in all their buildings, they would have had 3 schools with an enrollment of 10 or 12 pupils each. Now no school has an enrollment of less than 20. The teachers are pleased, and I think the schools better.

3. Advantages: First, larger schools, causing pupils and teacher to be more interested. Second, more regular attendance. Third, patrons are not bothered with taking their children in bad weather, but have them taken.

Financial statement:

Cost last year, 6 teachers, \$45 each per month, 6½ months.....	\$1,755
Cost this year, 4 teachers, \$40 per month each, 7 months	<u>1,520</u>
Cost this year, 1 principal, \$80 per month, 7 months	560
Cost this year, 2 wagons, \$20 per month each, 7 months	280
Total	<u>2,360</u>

\$2,360—\$1,755=\$605, extra cost to have one-half month more school and have a high school. The township did not have a high school until this year. I do not know whether there will be any savings in special school money or not.

4. No answer.

5. Three miles is perhaps the farthest and, as the wagon takes all on its road, some only a short distance.

6. Pupils in district No. 6, Harrison Township, Fayette County, transported to district No. 7, in said township and county. The first day the wagon went to the house of the children; but as the parents were opposed to the plan, they would not let the children go to school. The trustee told the driver to go after them every day until he told him to stop. The trustee then came to see the county superintendent, and it was decided to send the truant officer to see the parents. In the afternoon of the second day the truant officer made his visits, and on the morning of the third day all the children rode to school and have been doing so all term.

7. First. It is a good plan when a township has too many schools. Fayette County has about 10 schools too many.

Second. It is very difficult to get parents to see the advantages.

Third. Trustees do not care to do what the patrons do not want done.

Fourth. I think new trustees will be more willing to act than old ones.

Floyd County:

1. The sentiment is very much in favor of so doing.

2. It has not been tried in this county.

3, 4, 5, and 6. No answer.

7. This county is so hilly and the roads for the most part are so rough that I fear that the transportation system would not be successful. However, there is a growing feeling that it would be best.

Fountain County:

1. In favor of it as far as practicable.

2. Richland and Van Buren. Good. Fulton will try it next year to their new graded school. A great many children drive themselves several miles in all the townships.

3. There are no disadvantages, except bad roads. There is a saving, but can not give the figures.

4. They like it after trying, but generally oppose it before trying.

5. Three and 4 miles.

6 and 7. No answer.

Franklin County:

1. Trustees favor the plan. The people are not so favorable. They have no real reason, but give the "stock" argument.

2. Not tried.

3, 4, 5, and 6. No answer.

7. The sentiment is growing in favor of consolidation.

a This should be \$1,120, if the number of teachers and their salaries are given correctly.—ED.

Fulton County:

1. The majority favor it.
2. None at expense of county.
3. (1) Better grading; (2) thorough work; (3) the teaching of special branches; (4) better teachers; (5) large classes; (6) broader companionship and culture; (7) better buildings, roads, apparatus, etc.; (8) creates a good school sentiment.
- (1) Lack of proper conveyances. (2) Many patrons object to children going so far from home.
- (3) Riding in hacks with all classes of children.
4. Would have no other. They are well pleased.
5. We transport none. They all walk or drive. Five miles.
6. No answer.
7. I think the majority of the people in Fulton County favor centralization.

Gibson County:

1. Favorable. No gravel roads in the county, and for this reason the plan has not been tried.
- 2, 3, 4, 5, and 6. No answer.
7. I believe the plan will be satisfactory in a short time. Gibson County is now considering the road question, and as soon as the roads will permit we shall be ready to try the experiment.

Grant County:

1. The trustees are very generally in favor of doing away with the small district schools and sending to larger and more inspiring ones.

2. In Franklin, with good success.

It places the students in schools where there are more pupils and greater interest. The teacher seems to be inspired to do better work. In the small school generally the interest is dead. It is very clearly a financial saving to the township. The pupils are taken to school and brought back by a competent person, and when so many come together it lessens the chance for children to lower their morals. It is unsafe to let a boy and a girl of this age walk home together for any length of time. You see what I mean.

4. At first they objected, but are now seeing the benefits.

5. Three miles.

6. In Franklin Township the trustee did away with 3 schools, and in 2 of them the pupils were close enough to be as well accommodated in regard to distance as they were before the abandonment. One school was out of reach of others, and a small village wanted a new school, and it is these he hauls to a centrally located graded school. The pupils of the other two schools still walk to the other school districts.

7. At the next meeting of the trustees one of them, Mr. Slater, will read a paper on the subject. I think now we will abandon a number of our schools next year. We will simply abandon them temporarily. I think the plan a good one.

Greene County:

1. Sentiment not favorable to abandonment.

2, 3, 4, 5, 6, and 7. No answer.

Hamilton County:

1. We have tried the plan in a number of cases, and it is very satisfactory to officers and patrons. Under the plan we have vacated 20 little schools and saved hundreds of dollars of expense, and the pupils had better school privileges. There should be a direct law on the matter to allow trustees and township councils to do as they think best in such instances.

2. Adams, Clay, Delaware, Jackson, Noblesville, Washington, Wayne, and White River. In some cases the trustee furnished a wagon; in others an allowance was given some patron to do the transporting. B. C. Sherrick, of Washington Township, has vacated 4 schools and should vacate 3 more.

3. The pupils get better schools, the expense is less, good attendance, no tardiness, and better teachers in the schools. The pupils take more interest in study, dress, neatness; in short, conclude school is business.

4. At first seriously object, but afterwards favor it. It is an idea that is growing. It can be better favored where there are good roads. We have not attempted it on dirt roads.

5. From $1\frac{1}{2}$ to 4 miles. The nearest district house to Carmel graded school is 3 miles away. The parents do their own transporting in most cases.

6. The trustees of townships where there are stables pay liverymen for caring for pupils' horses. In townships not so favored the trustees build stables. At No. 1, White River Township, S. D. Basey has the whole school transported for \$1 per day. At No. 2, in Clay Township, J. W. Morrow transports for 50 cents a pupil, doing the driving.

7. To favor this plan, put the very best teachers in the center schools, give a music teacher, furnish every encouragement, and people go there of their own accord. The idea is well supported in Hamilton County.

Hancock County:

1. The sentiment of the present trustees is decidedly in favor of above plan.

2. In Center Township; to a very limited extent in Jackson. The effects have been entirely satisfactory to all who comprehend the best interests of their children.

3. The advantages are numerous; among them, greater class interest, by reason of larger classes; promptness of attendance; general interest, by reason of better graded schools. There has been much financial saving, but I have no statistics which would enable me to give actual figures.

4. Most patrons who have tried it are satisfied. Some complain—would rather have their children wade the snow for a mile and a half than ride two and a half. These are the exceptions, however. Generally I have found the patrons satisfied. The greatest difficulty is one of sentiment. Patrons do not like to abandon their home schools, however much time and circumstances may have depleted them.

5. Such pupils as have been transported in this county have been taken from 2½ to 3 miles.

6. This I am unable, at present writing, to do.

7. I very much fear that consolidation is blocked for the present in this county. There is even a pressure being brought to bear to reestablish some schools long since abandoned. I am combating this with all my might, but there is opposition to consolidation.

Hendricks County:

1. All my trustees feel that small schools should be abandoned.

2. Middle, Liberty, Guilford, Eel River, all with good effect.

3. Better the pupils' school privileges by placing them with teachers who have fewer grades to teach. For every school vacated, saves about \$2 per day. It has so far worked no disadvantage of which I know.

4. Patrons are well pleased, because the children are doing better.

5. Two and one-half to 3½ miles.

6. At first neither patrons nor pupils like it. But after starting they do not wish the school reinstated. We have had no trouble, and in some districts the patrons talk and apply for abandonment and transportation.

7. We have in the last six years consolidated and abandoned about 15 districts in the county, and prospects are for the abandonment of 10 more this and next year.

Henry County:

1. The sentiment is favorable to discontinuing the small schools so far as most of the trustees are concerned.

2. Dudley Township, with good success. Harrison Township, with success not so good.

3. Advantages: (1) Can procure better teachers. (2) Longer term. (3) Longer period for recitation. (4) Classes better and more evenly graded. (5) Cheaper and better buildings.

Disadvantages: (1) Pupils may have to wait for hack on bad days. (2) Where hack is not heated it is too cold. (3) Frequently too much crowded and might tend to cultivate habits unfavorable to etiquette. (4) It throws the good country boys in association with the uncouth, cigarette-smoking boys of the villages, since the graded school is in the village usually.

4. Dudley Township, the patrons like it fairly well. Harrison Township, not very well, owing partly, I think, to the prejudice occasioned by opposing it in the start.

5. As far as 4 miles.

6. In Harrison Township the patrons wanted a schoolhouse built in the district. The trustee thought there were not enough scholars to justify it, and refused. He transported the pupils. The pupils and patrons decided to oppose it, and have done so. They call the hack the "ice wagon," although it is well inclosed. Other districts, fearing a trustee might do them likewise, made it a trustee election issue and won.

7. I am not in favor of transporting good country schools where they are large enough to keep up a good interest; but am decidedly in favor of transporting small schools or schools in settlements where the patrons do not work in harmony with the schools. It seems a good thing where it can be done by the consent of the patrons, but not so good otherwise.

Howard County:

1. Nothing of the kind has been done yet, but I think it will be tried in some township next year. Some trustees and members of advisory boards think it is the proper thing to do. I am encouraging the movement all I can, for I have found many schools too small for good work. I really believe that better work is done in the overcrowded school than in the schools with a small enrollment.

2, 3, 4, 5, 6, and 7. No answer.

Huntington County:

1. Very favorable.

2. (a) In Lancaster and Polk townships. (b) A strong sentiment against it by the patrons before being tried; but almost universal satisfaction at close of the school term.

3. (a) Regularity of attendance, no tardiness, no playing "hooky," less or no complaint about conduct of pupils in going and returning from school, less liability to colds, therefore better health; and hence a much better school; longer term of school. (b) Complaint of patrons about destroying the sacred "little red schoolhouse." No real disadvantage. (c) In one case, instead of paying the teacher \$2 per day and other necessary expenses, pupils conveyed for 89 cents per day. In the other case a saving of a little over \$1 per day, besides the necessary expenses of fuel, etc.

4. Universally favorable in Polk Township. In Lancaster Township a few oppose it, but on no legitimate grounds.

5. In Lancaster Township, 3 miles. In Polk Township, about 4 miles.

6. At the time of taking the enumeration the trustees secured the consent of the majority of the patrons, and then let the contract of conveying the pupils to the lowest responsible bidder soon, and made other minor necessary arrangements. In both cases trustee bought hacks. The drivers at first found some trouble in discipline until the teacher and trustee gave the pupils to understand positively that the driver had the necessary power delegated to him by the teacher and trustee. No trouble afterwards.

7. Both the trustees (L. L. Ulrich, of Lancaster Township, address, River, Ind., and John M. Rodgers, of Polk Township, address, Monument City, Ind.) and myself gratified with the results.

Jackson County:

1. The trustees of this county favor it as far as practicable. In some townships the roads will not permit of it.

2. In Carr Township, it was a success. At first the patrons objected, but after it was tried they seemed to be satisfied.

3. An advantage in the case tried; was not only a financial one, but a great advantage to the pupils. It placed them in a good graded school, one in which there was an interest manifested in the class, also on the play grounds, gave them longer time for recitation, etc. Financially, a saving of 75 cents per day.

4. The most of them favor the plan. Some oppose, to be on the contrary side.

5. About 3 miles.

6. In Carr Township there is a school about 3 miles from Medora, a graded school. This school enrolled about 12 pupils. The trustee hired a man to convey them for 75 cents per day. He went out at a certain time and they were on the road when he arrived. The pupils were never tardy and were regular in attendance.

7. No answer.

Jasper County:

1. Decidedly in favor of discontinuing small schools. Under favorable circumstances in favor of consolidation.

2. Walker. We had a school of about 8 pupils. It cost us about \$90 to have these taken to another school. We saved over \$200. The pupils were better instructed and we were well pleased with the result.

3. It increases the length of school term. We can pay more, and thereby secure better teachers. It aids in the supervision of the county superintendent. Pupils were better taught. We saved about \$200 in one school last year. (Teacher, 130 days at \$2 per day, \$260. Fuel, \$40. Total expense, \$300. Cost of transporting, \$90. Saved, \$210.)

4. Objected at first, but were well pleased later. I think, however, that patrons as a rule are very largely opposed to the idea of consolidation.

5. Two miles.

6. We had a school of about 8 pupils. They lived about 2 miles from another school. We had been having a very poor school here, and decided that it would be best to take them to the other school. The year before our school cost us about \$300. We took these pupils to the other school for \$90 and gave them a much better school.

7. The great barrier in our way of consolidation is "bad roads."

Jay County:

1. There isn't much sentiment in favor of the plan, except in the case of very small schools. There has been but 1 school abandoned in Jay County in the past three years. That one was in Richland Township. Former pupils of that school are now sent to adjacent schools in the same township or are transferred to Dunkirk.

2. There has been but one attempt at transportation. That was in Penn Township, Granville Phillips, trustee. He had planned to discontinue 2 of his smallest schools and transport the pupils to Pennville, but when school was about to open such strong opposition was manifested by the patrons that he thought best not to attempt it.

3, 4, 5, 6 and 7. No answer.

Jefferson County.

1. The question of abandoning the small schools and consolidating the schools in the various townships of this (Jefferson) county has been discussed at the meetings of the board of education for the past few years, but thus far no definite action has been taken. They are fully alive to the merits of the plan, but are not ready to pronounce it feasible on account of many of the township roads being almost impassable during certain periods every year.

2. It has not as yet been tried.

3, 4, 5 and 6. No answer.

7. Several small schools have been abandoned in this county during the past three years, resulting in quite a material saving financially and in strengthening the other schools without working any great hardships on the pupils in the districts temporarily abandoned.

The roads are becoming much better year by year, but at present the plan of consolidating the weaker, or all of the schools of the townships, is almost impracticable.

Jennings County:

1. Except in 1 township (Spencer) there has not been any sentiment on part of trustees. In township named, with 20 miles of new pike road, the trustee has abandoned 3 country schools, and children attend the Central Township school at Hayden. There are other country schools yet in township, but I do not think they will be abandoned.

2. In none.

3, 4, 5, and 6. No answer.

7. I have been working on trustees and patrons along the line of consolidation in some localities, but as yet we have not been able to overcome the prejudices against the idea. I believe, however, with better roads, we are soon to be able to abandon quite a number of small schools.

Knox County:

1. The trustees, as a rule, think favorably of the plan and have discussed it freely. The conditions in this county are unfavorable to carrying into effect this plan. We have no good roads in this county at present, but elections have been held in 2 townships this month and good roads were voted. For the past three months the roads have been impassable.

2, 3, 4, 5, 6, and 7. No answer.

Lagrange County:

1. They are in favor of consolidation so far as the size of the school will permit economy and the topography of the country does not interfere. The probabilities in this county are for limited consolidation.

2. Springfield, Bloomfield, Johnson, Clay, and Van Buren. The parties transported are generally well pleased. All complaints come from unsatisfactory conveyances.

3. I do not have the figures, but trustees are largely figuring on whether they can heat, repair the house, and pay teachers so cheaply as to secure transportation elsewhere with its teaching. Half of the transportation is to neighboring district schools. The cost is about two-thirds of the old rate for a small school.

4. The graded schools in most cases are not sufficiently well equipped to make their superiority apparent to all. The parents, as well as pupils, like increased numbers and better organization, but resident taxpayers generally work against the abandonment of a school.

5. From 1½ miles on the route to the extent of said route, about 4 miles or more from the schoolhouse.

6. Transportation in this county is in its infancy, as fully half of the transporting was begun this year. They add one school at a time generally, but the additions remain, although the process is not very rapid. Johnson doubled the number of wagons to two schools in 1899-1900. Same of Bloomfield. Van Buren began, and so did Clay.

7. It seems that consolidation will gain ground somewhat in proportion to the number of new houses demanding reconstruction, as few or no new structures will be placed near graded schools already established.

Lake County:

1. They think good roads must be secured first. The people are against it, and the trustees do not care to antagonize them too much.

2. Hobart Township. This was only for high school pupils, and sixteen were transported 4 miles with apparent satisfaction.

3. Have never tried it in country schools.

4, 5, 6, and 7. No answer.

Laporte County:

1. The matter of consolidation of schools has received much attention in this county within the last three years, and trustees are, so far as I am able to learn, unanimously in favor of abandoning small schools and transporting pupils at public expense to village schools or other schools in the townships.

A resolution by the county board favoring the abandonment of all the schools with an enrollment of less than 9 pupils was spread upon the record of March 6, 1899.

2. (a) Galena, Kankakee, Center, Johnson, Noble, and Hanna townships. (b) Has given general satisfaction to patrons and school officers, and made a saving to the townships of over half.

3. I would consider the following advantages: (a) Much cheaper, saving in heat, school apparatus, and repairs of buildings in case schools had been opened in the abandoned districts. The saving must be greater in case several schools are abandoned in the same township. (b) Attendance has been increased and cases of tardiness reduced. (c) Pupils' health has not been impaired by wet feet, etc., and better sanitary conditions have been possible in the school. (d) I believe better roads will follow. (e) It will give a longer term of school under better conditions. (f) Closer and more efficient supervision. (g) It will give a graded instead of an ungraded school, where each pupil will have the advantage of personal contact with his instructor, and the interest and emulation accruing from larger classes instead of being a member of one of eight divi-

sions under the same teacher, and, as in many cases, the only member of his class in the school. (h) It will give each teacher an opportunity to specialize in her particular grade; give her a chance to select the work which she best likes and is most efficient in. (i) Make a united whole of township schools and bring them more nearly on a standard with city schools.

I would consider long distance, in some cases, and bad roads in some localities, as disadvantages.

In no case have all the schools of a township been consolidated in this county. Transportation for the small schools has cost from \$75 to \$160. The cost of maintaining the abandoned schools would have cost—teacher, \$320; fuel, \$25; apparatus and repairs, \$35; total, \$380.

4. Patrons as a rule remonstrated against the plan at first, but in no cases have substantial complaints been made. After the plan is once in operation and patrons see its advantages they show a disposition to advance the cause.

5. Pupils have not been transported more than 3 miles in this county at any time.

6. Worden school, in Noble Township, was closed last fall and a team hired to transport pupils a distance of about 3 miles for \$1 per day. The wagon used was to be covered and to run on schedule time. Patrons were generally pleased until a boy or young man was hired as driver. Young man proved incompetent and a man was employed. In this particular case had the driver been competent from the first, and the wagon been better equipped, the plan would have been highly successful. All is running smoothly at this time, and more schools in the same township will probably be closed in the near future.

7. I think we can safely say that consolidation is the order with our trustees, and small schools will continue to be abolished as rapidly as it is possible for us to do so. We aim to make the change gradually at first.

Lawrence County:

1. They generally oppose it, but it is because the patrons object to it.

2. Not tried.

3, 4, 5, and 6. No answer.

7. There are many places in this county where schools could be consolidated and the schools would be made better and money would be saved.

Madison County:

1. The old trustees (now in office) are in favor of it; but they are afraid to attempt anything now, as we have so many good single rooms.

2. They transport about twelve from Rigdon to 2 miles into Boone. The result was not the best because it crowded the school where they went. It would have been better perhaps to transfer and send them to Grant County.

3. No answer.

4. Don't like it.

5. Two miles.

6. No answer.

7. It has not been sufficiently tested in this county to reach any conclusions in the matter.

Marion County:

1. The sentiment among trustees is strongly in favor of abandoning the small schools. In some instances trustees have attempted the same, but have met with opposition from parents.

2. Transportation (limited scale) in Washington and Decatur townships. In the first instance, the patrons much pleased; in the second, township patrons dissatisfied and demanded the reestablishment of the school.

I am of the opinion, however, that this dissatisfaction arises from the desire to have a certain teacher obtain a school, regardless of advantages.

3. Advantages: Closer grading; broadening of pupils from association; less exposure in bad weather. Disadvantages: I have observed none.

I can not give figures, as a portion of this was barter between trustee and parent.

4. See statement No. 2.

5. Greatest distance, 3 miles.

6. Too irregular to give incident.

7. We have had no regular work in transporting pupils; in one case trustee transported a part of the year and parents a portion of the year. In some instances parents transported their own children and those of one or two other families. The work in this line here is irregular. We meet with much opposition from the older inhabitants; the younger element favor the idea.

Marshall County:

1. Favorable.

2. We have not transported pupils, but have abandoned a few small schools where the pupils would not have to walk more than 2 miles to reach another school.

3. Makes weak schools strong and is less expensive. Can not give figures.

4. Educated people can see the benefit of the combination, thus giving better instruction.

5 and 6. No answer.

7. We do not transport any pupils, but I think if we can get our patrons to see the advantage

of closing the smaller schools and uniting them with the larger ones, we will get the advantage of graded work at a less expense.

Martin County:

1. In the affirmative. Public sentiment is growing in favor of it.
2. Not one.
3. Our disadvantages would be bad roads and number of streams that cut up the county.
- 4, 5, and 6. No answer.
7. The physical geography of Martin County would make it impossible to carry the concentration as far as in a more level country. We shall have to have more schoolhouses than a more level one, as a matter of course.

Miami County:

1. Trustees are in favor of consolidating schools and are doing so as far as practicable.
2. None.
3. Better schoolhouses.
4. Favorable.
- 5, 6, and 7. No answer.

Newton County:

1. In a few townships the trustees favor consolidating schools, but in most townships the roads are too bad during the winter months.
2. In McClellan and Lake. Lake has not tried it extensively, and trustee says but little for or against it, but I think it will be quite popular in the near future. Trustee Elmer Skinner, of McClellan, says: "Increased attendance, little or no tardiness, better work, better teachers at advanced wages, longer school term, better libraries, better supervision."
3. Schools were consolidated from 6 to 3. Mr. S. pays liberal salaries, pays special music teacher, etc., and finds a net saving of \$708 per year.
4. Mr. S. states: "First, only objections, dislike to send pupils so far from home; second, local jealousy and a natural dislike to getting out of the old ruts. The patrons, with few exceptions, are at present pleased with the change."
5. All pupils outside of a 2-mile limit.
- 6 and 7. No answer.

Noble County:

1. Our trustees are now discussing the subject. Some favor and some oppose it.
2. In Orange Township with excellent and satisfactory effects.
3. Advantages: Better schools, larger classes in certain grades, better grading, gives teachers a better chance, inasmuch as they do not have so many grades to the room, and, in fact, I approve of it in every way where roads permit of the consolidation.
- In some parts of our county the roads are bad during a portion of the year. I can not give figures of saving, but the trustee of Orange Township, W. W. Williams, can.
4. I believe the patrons are delighted after having tried it. Of course there was some grumbling and "kicking" at first.
5. I think 4 miles is the farthest.
6. Mr. Williams will be able to do this far more intelligently than I can.
7. No answer.

Ohio County:

1. They are very much in favor of abandoning small schools and consolidating when it is practicable.
2. In Randolph Township, and has been satisfactory.
3. Better school, and saving of about \$150 in the one case where we have transported pupils.
4. Some favor and some oppose it.
5. Two and one-half miles.
6. Have only had one, from which I have given the preceding.
7. No answer.

Orange County:

1. In townships where the roads are graveled and country is fairly level it is favorably considered by the trustees, and I believe will be tried before long.
2. None as yet.
- 3, 4, 5, and 6. No answer.
7. One township in Orange County is ripe for the experiment, and I think there would be nothing in the way of successfully putting the plan into operation in this township in the near future. The people have been talking it, and some of the country schools adjacent to Orleans are almost deserted, as the children are going 2 and 3 miles to town, by reason of good roads and superior school advantages.

Perry County:

1. Two trustees have made an effort to abandon small schools. Oil Township has abandoned 3, and a fourth will be this year. Union will unite 2 this year. I am going to try to reduce the number in Clark. Other trustees are afraid of their popularity.

2. Have never tried it. Can not interest anyone in it.
3. We have a few localities where this plan is practicable.
4. Don't think.
5. Condition of our roads will make this impossible in most parts of Perry County.
6. No answer.
7. Tobin Township presents the best opportunity for a trial of transporting in this county.

Pike County:

1. We have discussed the matter but little. There are a few trustees who will have to transport or build new houses. Our trustees are in favor of that measure that will make our schools better. Will discuss that subject at our next meeting—May 1.
2. None.
3. Don't know.
4. They know nothing about it.
- 5 and 6. None.
7. No answer.

Porter County:

1. The sentiment is strong among trustees, but the people of the smaller districts object, and it is difficult to lead them to see the benefit.
2. In Union Township we are transporting one school, and with good effect, but we had much trouble to start them. Now they do not desire to go to the old school.
3. No disadvantage whatever. To say nothing of the \$240 saved, the advantage of having the children in larger classes and having access to a better library and school apparatus can not be estimated.
4. As I stated under No. 2, the parents fought the movement at first. They furnished all kinds of objections, but found by trial that their objections were not well founded.
5. Two miles.
6. We had a school of nine. The parents objected on the ground that if the school was closed they would never have a school again. They threatened to take it to the courts, but the school officials were willing to do so, and finally the parents submitted and are now well pleased.
7. I think as soon as we have the road problem settled we can save much money by having all our smaller schools transported.

Posey County:

1. Generally they are in favor of holding to the small schools. The idea is a new one, and the township trustees of this county are afraid that such consolidation would be condemned by the school patrons of their townships. The subject has been much discussed at the county teachers' associations and also at the farmers' institutes. The farmers of the county are of the opinion that the driver of an ambulance conveying children from one school district to another in the winter season would probably find a Posey County mud hole that would block the entire scheme.
2. None.
- 3, 4, 5, and 6. No answer.
7. It is my opinion that the idea is a good one; but with the consolidation of schools must also come improved and better country roads. I am also of the opinion that the saving in the salary of teachers, improvement of schoolhouses, together with the better culture that would be afforded by consolidation, would be in a great measure sufficient to improve the roads. I am heartily in favor of the scheme, but am of the opinion that it will be many summers and winters before it can be realized in this county.

Putnam County:

1. A few trustees think it would be best to abandon a few schools, but feel that until the sentiment of the patrons favors such a course no work in this line can be done.
- The patrons soon learn the law when they are requested to agree to have their school discontinued and refuse to do so. They have refused transportation when offered them. Nothing can be done here until the law bearing on the subject is changed.
2. Has been refused in Clinton, Russell, and Floyd.
- 3, 4, 5, 6, and 7. No answer.

Randolph County:

1. No effort has been made in the direction indicated, which would imply that they are unfavorable to the plans.
2. In no townships worthy of noting.
- 3, 4, 5, 6, and 7. No answer.

Ripley County:

1. They are not favorable to it. In two different townships one school has been abandoned on account of average attendance being very small—only about six for the term.
2. It has not been tried.
- 3, 4, 5, 6, and 7. No answer.

Rush County:

1. Favorable, but hesitating to breast the opinion of some people called the "public." A few can make a great noise.
2. Jackson Township tried this during the school year 1893-99.
 - (a) The roads were so bad in the locality in which it was tried that it was almost impossible for the driver to carry out his contract, so it was continued about two months.
 - (b) The children transported at public expense belonged exclusively to poor families, and a vigorous protest was made by heavier taxpayers.
3. (a) The pupils were always on time.
- (b) The condition of the roads was a decided disadvantage.
- (c) In this instance there was no saving of expense.
4. Those receiving the benefit were well pleased. The others were greatly opposed.
5. This experiment was made for 2½ miles. It was a little town—Henderson—which was conveyed to an adjoining district.
6. In Washington Township the pupils transport themselves. Some twenty years ago the trustee, W. S. Hall (he is the original promoter of concentration of schools in Indiana), rearranged the schoolhouses, making the number 5 instead of 8, and started a graded school. The township is 6 miles square, so that some pupils must drive 4 miles to reach the graded school. He was bitterly opposed by a majority of his people, but by his tireless energy and determination arranged the township so that money has been saved to the people, and they can maintain seven months of school with a low levy. The diagram at the close of this section will show the location of the schoolhouses. The truant officer has little to do in this township, as there is a splendid school sentiment. Some patrons are now sending their children past other schools to get them into the graded school of three rooms and two years of high school. All eighth-year pupils except two in the township have attended the graded school during the past year, thus relieving the county teacher of some work.
7. No answer.

Scott County:

1. The sentiment is strongly in favor of abandoning small schools and making the districts larger, but is not much in favor of the one schoolhouse idea.
2. Transportation has not been tried.
- 3, 4, 5, and 6. No answer.
7. I do not think the time has yet come in this county for the abandonment of district schools in general, and believe that any attempt at general consolidation will be viewed with suspicion by the people.

Shelby County:

1. I have brought the matter before my trustees several times, and they consider the matter very favorably.
- In view of the new township law, however, they are very doubtful whether it can now be done very easily.
2. It has been tried in Hanover Township, Shelby County. It was very satisfactory to the patrons after it had been instituted, but it received their hearty disapproval at the time the trustee had the move under consideration.
3. By this system the pupils were enabled to secure the graded work; they were in classes that were larger, thus securing a better class enthusiasm; it brought the country pupils in close touch with the high-school pupils, creating in the country pupils a desire for high-school work. I do not remember the exact saving, but the cost per pupil in the transferred school was decreased about one-half.
4. As I understand it, the patrons like the plan very much. The trustee of this township intended to consolidate all the schools of his township this year, but he had an advisory board not in sympathy with his plans; hence he let the matter drop.
5. In this case the pupils were transported about 4 miles, I think.
6. During the last school year William Patterson, trustee of Hanover Township, decided to transfer the school just north of Morristown to the town of Morristown. He secured a closed hack for the purpose, secured a hackman for the sum of \$1 per day, and gave the plan a trial. Mr. Patterson will be glad to correspond with anyone that has a move like this under consideration. As I have said, however, the arrangement was entirely satisfactory in every particular.
7. This plan demonstrates that there are a large number of schools being conducted at an expense out of all proportion to the cost of maintaining other schools that, from the large number accommodated, are far more successful schools; that it gives to the children of the remote districts an opportunity of attending the graded schools, thereby having an opportunity for more extended work than in the districts that work under more competent instructors. The plan recommends itself to every school man, but, I am sorry to say, it does not at first appeal to the mass of school patrons.

Spencer County:

1. There is a tendency here to abandon small schools. I think all the trustees would encourage consolidation enough to have all the buildings of at least two rooms.

2. The townships have not transported any.
- 3, 4, and 5. No answer.
6. At one place, Lake, some pupils go several miles, using their own means of transportation, and all interested parties see it is the best thing to do at present.
7. No answer.

St. Joseph County:

1. With regard to the report for transportation of children, will say that it has not been tried here enough to tell how it would work. One township is transporting some pupils to prevent transfers, and so far it works very well. The cost is a little less than to transfer, and it makes what was a small school large enough to make a good school. I think that more of this will be done each year, and some small schools may be closed by this means next year.
- 2, 3, 4, 5, 6, and 7. No answer.

Steuben County:

1. This has been done but little in our county. At present we have but two abandoned schools. The pupils belonging to these districts were accommodated without transportation. When the attendance is but four or five pupils the trustees generally abandon the school.
2. Transportation has been tried once in the county, in Jackson Township. Schoolhouse burned, and trustee transported pupils to his township graded high school. Attendance was fairly good, but not as good as in the home district.
3. In the one case the saving was about one-half. Do not know exact figures. The trustee did not have any extra expense except the transportation. He did not add to his teaching force in the high school.
4. The patrons who sent children accepted the situation, but preferred the school nearer home, so the trustee built new house.
5. About 4 miles was the farthest in the case mentioned. No transportation has been done for over a year.
6. I believe I have given enough data so that you may know the general nature of the experiment. I have given all I know.
7. No answer.

Sullivan County:

1. We are trying to disband the small schools where the pupils can be accommodated at some other place. In the last two years we have abandoned 2. I think we will abandon 2 more the coming year.
2. None.
- 3, 4, 5, and 6. No answer.
7. I have been trying especially to get country schools discontinued where the school is located near some town. Our roads are just beginning to get in shape to think about transportation of pupils. We have had no gravel roads until the last three years. We have more single schools than we need if we can once get them properly located.

Switzerland County:

1. All school officials of this county know that the plan would not only be universally unpopular, but also appreciate the fact that to consolidate the schools by township, with the view of transportation of pupils would not be practicable, but absolutely impossible, because of the rough and uneven surface of the country, the irregularly and imperfectly laid out system of roads, and in the winter time the absolutely impassable condition of the roads.
- 2, 3, 4, and 5. No answer.
6. The experiment has not been tried, but the experience of the superintendent in visiting schools this winter is conclusive evidence to his mind that the plan would be a complete failure. Personally the county superintendent favors the plan in such counties where the roads and the other conditions would make the plan practicable, or even possible.
7. No answer.

Tippecanoe County:

1. The trustees in this county are agreed that something should be done, as indicated above, but I think it will be difficult to accomplish much this year, for political reasons. We have about 25 schools, the enrollment of which is less than 15.
2. It has not been tried in this county. I am trying to get this started in 4 townships for next year. It would be a mistake and defeat the project here if we were to try to make this general throughout the county. If we can start it in a few places and show that it can be accomplished and carried on successfully, then we can make it general. County especially well situated for consolidating schools. High schools in every township and good gravel roads.
3. No answer.
4. Has not been tried.
- 5 and 6. No answer.
7. If there were some law to warrant trustees to close schoolhouses, much could be done. But as long as trustee has to obtain consent of patrons he can not accomplish very much. A law to this effect would work well here: The county superintendent, the county truant officer, and

the trustee in his respective township to constitute a commission with power to close school-houses and school distance to be 4 miles when conveyance is provided.

Tipton County:

1. All the trustees are in favor of abandoning small schools and placing the children in the graded schools wherever it can be done.

2. In Jefferson Township this plan has been in operation for the past three years.

One school of about 10 pupils was abandoned; a hack used for transportation of pupils to the Kempton graded schools. In Wildcat Township no transportation has been done or schools abandoned by the trustee, but a great many eighth-year pupils in a radius of 4 to 5 miles have been driving in buggies in order to get the better advantages offered in the Windfall schools.

3. One of the greatest advantages in the cases above named is they receive superior instruction; another, they are given more attention. From a financial standpoint it is a great saving to the township. The year just closing Jefferson Township had 120 days of school.

Teacher's salary, at \$2 per day.....	\$240
Cost of fuel.....	22
Repairs, etc.....	10
Total.....	272
Cost of transportation.....	109
Saving in one year.....	172

4. Where it has been tried patrons are in favor of the plan.

5. Four miles one way.

6. Three years ago Mr. A. H. Hinkle, trustee of Jefferson Township, Tipton County, was confronted with the problem either to build a new school building or transport the pupils to the Kempton schools, a distance of 4 miles. He chose the latter plan, although meeting with some opposition from the patrons. The plan has been in operation for three years, and the patrons are now favorably impressed with it, having seen the better advantages their children are receiving in the graded schools, as well as the financial saving of about \$175 each year to the township.

7. Attempts will be made in other townships next year to consolidate some of the smaller schools, and unless we meet with too much opposition there will be 2 schools abandoned in Cicero Township, 2 in Jefferson, and 1 in Liberty.

Vanderburg County:

1. Generally speaking, our trustees believe in the abandonment of small schools.

2. Transportation has been tried in Knight Township, 2 colored schools having been consolidated, 1 school being abandoned. The conditions in this case were peculiarly favorable to the scheme, all the children living almost in one house, the distance of transportation being about 3 miles and the roads good. Naturally it has been a success.

3. There could be but one advantage in this case, and that a financial one. It saved Knight Township one teacher's salary minus cost of transportation.

Previous salary paid to teacher of abandoned school for month.....	\$40
Coal, brooms, etc., per month, probably.....	2
Total.....	42
Cost of transportation per month.....	15
Amount saved to township per month.....	27

4. Patrons approve the plan.

5. Transport pupils about 3 miles.

6. No answer.

7. Plan demands good roads and good vehicles; stoves needed for winter. Outside of inconveniences, such as getting children ready for school very early, bad roads, etc., the plan of course secures, as a result, all the advantages and disadvantages of the graded-school system and loses all the advantages and disadvantages of the district system.

Vermilion County:

1. One township trustee is trying to do this. All agree that it should be done.

2. One township, Helt, has offered this in one instance, but the patrons would not accept.

3, 4, 5, and 6. No answer.

7. The patrons of a small old school cling tenaciously to that school apparently for what it has been. They object to transportation for various reasons, such as "too cold," "too crowded," "danger of runaways," "too far," etc. Prejudice and selfishness would probably cover ground of objections.

Vigo County:

1. The trustees favor consolidation, but have been slow to act because the roads have been so poor that it has been thought to be impracticable at present. An extensive system of gravel roads is now in course of construction, which, when completed, will remove the difficulty of transportation.

2. In Otter Creek Township; failure.
3. No answer.
4. Patrons were opposed to the plan.
5. No answer.
6. The trustee of Otter Creek Township attempted to abandon a school whose enumeration was about 30. The patrons of the school employed attorneys to bring action against the trustee. Before the suit was filed the trustee reestablished the school.
7. No answer.

Wabash County:

1. The sentiment among trustees is a great deal stronger than it is among the patrons. I do not mean the making of just one school for the township, but the throwing together of two or three district schools.

2. We have not tried transportation except the transporting of a few pupils who happened to live more than 2 miles from any school.

3, 4, 5, and 6. No answer.

7. Personally I am very much in favor of throwing as many small schools into one as possible. We have fairly good pikes, and I am inclined to the belief that consolidation would be possible in parts of our county and better results could be had for the amount of money expended.

Warren County:

1. On account of bad roads the majority of the trustees and people do not favor the plan.

2. No answer.

3. We have not tried the system as yet.

4, 5, 6, and 7. No answer.

Warrick County:

1. Our trustees will not talk of such a thing, much less can I get them to try it. Our roads are 20 feet wide and 2 feet deep during most of the winter, and it is next to an impossible thing to get children to school a distance of 1 mile during a part of the year. It has not been tried in any of our townships, and from present outlook it will not be tried for a number of years, or until the law compels it. People are wanting schoolhouses on every 100 acres of land.

2, 3, 4, 5, 6, and 7. No answer.

Wayne County:

1. Abandon whenever possible and consolidate. In the past ten years we have abandoned 27 schools. We expect to abandon 3 more this year.

2. Boston, Clay, Franklin, Green, Jefferson, New Garden, Perry, and Webster. Very satisfactory results.

3. Advantages: Either graded work or longer school. We have 1 school abandoned—the pupils were divided—a part of whom were within 2 miles of another school; the remainder we haul to another school at a total cost of \$20—saving \$330. Our hacks cost from \$85 to \$120 in the other cases. Counting advantages of graded school work we save at least \$3,000 a year.

4. At least 95 per cent of patrons would not go back to the old plan.

5. From 2 to 4 miles.

6. When the Ballenger school, Green Township, was abandoned, the patrons protested in strongest terms, threatened litigation, etc. The year following one among the first questions asked the trustee when taking the enumeration, "What are you going to do with our children this year?" The trustee wisely asked: "What is your wish?" The answer: "Give us the hack and graded work; we were mistaken last year."

7. "Consolidation" is the only solution of strengthening our schools and reducing the cost, at the same time furnishing better teachers at better salary. (See plan of Webster Township, p. 203.)

Wells County:

1. The trustees of Wells County are conservative on this question. There has been but 1 school abandoned and those pupils are hauled to a township graded school. The principal of that school joins me in making this report.

2. Chester has abandoned 1 school and pupils are transported to graded school. Other districts desire transportation to this school.

3. This is the third consecutive year pupils have been transported from District No. 8, Chester Township, to the Keystone Township graded school. The advantages are more numerous than the disadvantages.

Advantages: (1) Pupils are never tardy. (2) Attendance is better. (3) Pupils reach school building with dry clothes and are not tired. (4) Better teachers. (5) More time for recitation. (6) More pupils in class, hence better discussions in recitation. (7) The expense is cut down at least one-third. (8) Better discipline.

Disadvantages: (1) Pupils living near their proper district are compelled to prepare for school earlier. (The advantages are so great we seem inclined to omit any disadvantages.) (2) Bad roads.

4. The patrons are highly pleased with the plan as long as the driver of the transportation

wagon is qualified and good order is kept along the road. The pupils should be held responsible for their conduct by the principal of school. The patrons will be satisfied as long as transportation is conducted properly, just as they would be satisfied with the proper teacher at their home district. Patrons are not satisfied with a disorderly school; neither are they satisfied with an unsystematic carryall system.

5. In district No. 8, Chester Township, we make a trip of 8 miles morning and evening, or 16 miles per day. It takes about one hour and fifteen minutes to make the trip.

6. September 19, 1898, district No. 8, Chester Township, Wells County, Ind., was transported for the first time to Keystone Township graded school. At first it was a novelty to pupils, patrons, and school officers. The children were not orderly, probably due to lack of government in their former district school. The order gradually grew better, but the climax was not reached until two pupils were punished by principal of school for misconduct. Since that time everything moves off nicely and pupils do not care to return to the district school.

7. No answer.

White County:

1. First class.

2. Jackson, Liberty, Union, and Big Creek.

The "transportation" of Jackson Township was fairly satisfactory to all—will try it again this year on additional schools. One school in Liberty Township has been transported four consecutive years and will be continued. Union Township transported 1 school last year and will transport 3 this year. Big Creek, good.

3. (a) Better classification, more time for recitation, breaks up feuds, and physically better for pupils; also better teacher.

The only disadvantages are: Residence far apart and muddy roads on the prairie. The savings per school are: Jackson, \$150; Liberty, \$180; Union, \$165; Big Creek, \$220.

4. At first they object, but one year will win over four-fifths of them. Our first effort in Jackson Township met with stout resistance, but last year the objectors asked to have the school transported the next year.

5. Varying from 3 to 5 miles.

6. Our first effort was made in Liberty Township, 1896-97. The house in District No. 7 was unfit for use; the trustee had no funds to rebuild that fall, and the only way out was to take the pupils to a two-room school in Buffalo. When the trustee took the enumeration in 1897 the patrons insisted on being transported again the next year, and the next, etc. In my opinion, there will never be another school taught at No. 7.

7. In addition to the townships mentioned in No. 2 (each of which will transport from 1 to 3 new schools next year), Prairie Township will transport 4 schools to Brookston next year; Princeton Township, 2 to Wolcott, and I think others will join the procession later in the year.

Centralization by means of transportation gives the country folk an equal chance and advantages with the towns, and costs less in taxes. The system deserves to be worked hard and live always.

Common wagons and open carriages should not be used to transport pupils. Children have fallen out of these open rigs and received severe injuries.

The common "fair-ground hack" is more convenient, bars accidents, and protects the pupils from sun and storms.

Whitley County:

1. The sentiment of abandoning small schools, especially where they are located less than 2 miles apart, prevails.

2. In Union and Etna townships the results are satisfactory. School work is more interesting.

3. Advantages: A larger school with its consequent inspiration to both teacher and pupils. It is economical. Last year teacher in one school that is now abandoned received:

\$36 per month for 7 months.....	\$252
Additional expenses—wood, supplies, etc.....	40
Total.....	292
Cost of transportation, 140 days.....	140
Financial saving	152

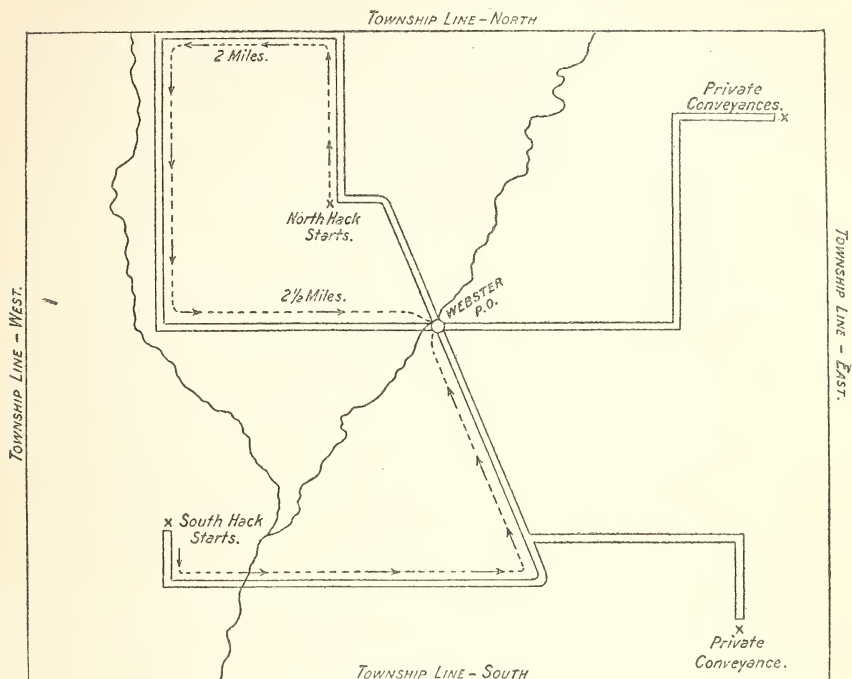
This is a fair example in Whitley County. The saving in finance is usually added to the salary of the other teachers, giving the trustee an advantage in securing good service.

4. Patrons at first are not enthusiastic. It is not a popular move to take the schoolhouse out of a man's dooryard. However, whenever it has been judiciously tried it has proven satisfactory. In one school the trustee provided transportation the first year; the second year people were so well pleased that they furnished their own transportation. We are particularly careful to secure a good teacher in the school to which transportation is made.

5. From 2 to 3½ miles.

6. See No. 4.

7. We have abandoned 3 schools in Whitley County, and expect to abandon 4 more next fall. No attempt is made to consolidate all the schools of a township at the center.



Plan of Webster Township, Wayne County, Ind. Complete Consolidation of Schools.

CONSOLIDATION IN WEBSTER TOWNSHIP, WAYNE COUNTY.

The accompanying figure gives the township plan of transportation of Webster Township, Wayne, County, Ind. In this township there has been complete consolidation of schools for several years. I made a personal visit to the township and found the citizens, pupils, and teachers pleased with the plan. They have a well graded school, good teachers, three years of high school work, and good society. Compared with the old order, there is a financial saving, though a longer school term and high-school advantages are secured by consolidation of the schools.

CONSOLIDATION IN WASHINGTON TOWNSHIP, RUSH COUNTY.

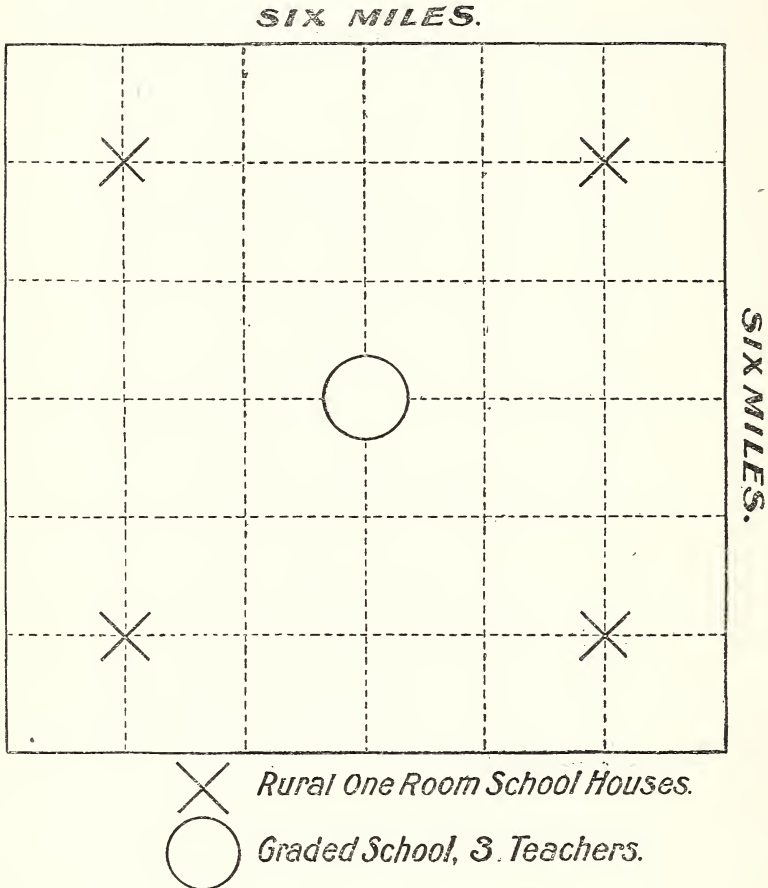
Washington Township, Rush County, Ind., is 6 miles square. The ordinary arrangement of rural schoolhouses in a township of this size would require 9 schoolhouses. Mr. William S. Hall, the original promoter of consolidation in Indiana, made a rearrangement of the township plan during his trusteeship so that only 5 buildings are required—one in each corner of the township, 1 mile from the township lines, and a graded school building in the center (see plan on following page).

The central school has 4 teachers, three years of high school work, and 111 pupils, distributed as follows:

Grades 1 and 2	28 pupils.
Grades 3, 4, and 5	30 pupils.
Grades 6 and 7	25 pupils.
Grades 8, 9, and 10	28 pupils.

Sixty-eight pupils transport themselves without expense to the county. A barn was built on the school grounds, and pupils who drive, stall and feed their horses without expense.

The 4 country schools of the township have an enrollment of 103 pupils. The truancy officer has made only one visit to the township during the three years of the operation of the law.



Plan of consolidation in Washington Township, Rush County, Ind.

The system adopted in the township is a good one. It is economical; it makes possible better supervision; it provides a high school, and organizes the educational forces.

AN INQUIRY REGARDING CONVEYANCE OF SCHOLARS IN NEW HAMPSHIRE.¹

[By State Superintendent Channing Folsom.]

* * * The school board is a court of last resort in deciding what schoolhouses shall be used for school purposes. If this power is used arbitrarily it may do more injury than the best schools can counteract; if used tactfully, if pains be taken

¹ From the Fifty first N. H. School Report (1899-1900), pp. 271-292.

before discontinuing the use of a schoolhouse to show the parents that the children will be benefited by the proposed course, the prompt closing of a large number of schoolhouses and the conveyance of the children to other buildings would undoubtedly result to the educational advantage of the State.

It is unquestionably true that children can be better taught in schools of medium size than in extremely small ones. It is poor economy, both educationally and financially, to conduct a school of four or five pupils, when another school exists within 2 or 3 miles to which the children may be conveyed. The only exception to be admitted in applying this principle should be caused by the inconvenience of sending very young children of different families away for the entire day, when there are no older members of their respective families to care for them during the noon intermission.

The law requires that children of all parts of the district shall be furnished with "equal school privileges, as far as practicable." It is manifestly impossible under any system that all should live at equal distance from a schoolhouse. The framers and enactors of the law provided against a too long walk for children by allowing the school board to expend 25 per cent out of the appropriation for schools in transportation. The district has no right to vote that no money shall be expended for this purpose, and such a vote in the district meeting has absolutely no binding force upon the school board. The law commits the matter entirely to its discretion, and the district may not give instructions.

The objections usually urged by the residents of rural sections against public conveyance in lieu of a local school are:

1. That the closing of the local school tends to the depreciation of farm property.

The public school was not established, nor is it demanded by our State laws, for the purpose of enhancing the value of property in the vicinity of the schoolhouse.

As evidence of this alleged fact, the objectors point to the abandoned farms and cite the small number of children in many towns where the system of conveyance prevails. Such people are disingenuous or ignorant. A study of conditions for the last fifty years would show the confusion of cause and effect. A schoolhouse on every farm would not repopulate the rural sections of our State. If this repopulation ever comes, it will be due to different influences than those of the small rural school.

Much of the opposition based upon this objection is probably really due to the conservatism of our rural population manifesting itself in opposing the full fruition of the town system.

When it is shown, however, that transportation has in many sections tended to build up the rural sections of the town; that under this plan the number of families sending children to school and the number of children attending school have steadily increased since transportation has been substituted for the local school, this objection loses what little weight it ever had as an argument.

2. It is said that a ride of several miles every day to and from school is too hard for children.

In reply to this it may be said that it is easier for child or adult to ride 3 miles than to walk 1, and that in stormy or cold weather the ride entails less discomfort and subjects the rider to less exposure than falls to the lot of the pedestrian.

Records show that punctuality and regularity of attendance have been materially increased by a well-appointed system of transportation. An actual comparison of school registers proves that some children have attended school twice as much during a school year when carried in a comfortable conveyance to a distant school as the same children did when attending their local school.

If a contract for conveyance is made by the school board with some person other than the parent of the children, the responsibility rests with the board to see to the proper character of the driver, the team, and the vehicle.

3. It is objected, generally by people living in close proximity to the local school-house, that children, particularly very young ones, should not be sent away from parental care for the entire day.

This is the objection of the most weight among those usually urged against conveyance. Care should be taken by school boards to guard against evils that may arise under this head. When children of the rural sections are gathered in the village schools, a matron should be employed by the board to take charge during the teacher's absence at the noon intermission. This is demanded by the welfare of the school and protection of school property, as well as for the care of the children. Pupils remaining at noon should be as absolutely in charge of the matron during the intermission as they are in charge of the teacher during the school. Their moral and physical well-being demand this. They should not be allowed to roam about the streets at will, but should be required to remain upon the school premises unless a written request is received from their parents for different treatment.

When this course is not practicable, teachers must be impressed with their responsibility for a proper control during the noon hour.

The advantages to be obtained from discontinuing small schools and conveying children at the expense of the district are:

1. Economy.

Transportation can be performed usually at less expense than a good teacher can be employed, and the money thus saved may be applied to making the enlarged school better in furnishings, in equipment, in teaching.

2. Better teachers and equipment.

The best teachers can not be induced to accept positions in the three-scholar or the five-scholar schools, even when public sentiment allows the school board to seek for them with the offer of sufficient salary. The doctrine prevails that "anybody can teach" the small school. This theory places the small rural school in charge of untrained, inexperienced teachers, many of them of small scholastic acquirement and no professional ambition, who "keep school" until it is "the turn" of some other local favorite of the same kind. Consolidation enables the board to pay better wages, and hence to employ better teachers.

3. Better supervision.

Consolidation, by lessening the number of schools to be visited, enables the supervisor, school board, or superintendent to make more frequent visits and to get into closer touch with pupil and teacher.

4. Regularity of pupils' attendance.

With a comfortable and regular conveyance the weather, temperature, and bad roads cease to be important factors in causing absenteeism.

5. Better educational spirit.

The pupil of the small school lacks that emulation and competition so essentially necessary to progress which will be afforded by contact with a larger number of children. This is true even when the teachers are equally competent. It has double weight when we consider that the better teachers are almost uniformly in charge of the larger schools.

In March, 1900, a letter of inquiry containing the following questions was sent to every school board in the State:

1. What per cent of money appropriated for schools is used for conveying scholars to and from schools, under authority granted by chapter 92, section 1, of the public statutes?

2. What is the least distance that any scholar is conveyed at public expense in your town?

3. The greatest distance?

4. Have you any rule or regulation governing amount to be paid or distance of

conveyance; or do you deal with individual cases according to circumstances? State your regulation, if any.

5. How does the cost, to the district, of conveyance compare with that of maintaining local schools?

6. What are the advantages of conveyance?

7. Advantages of the local schools?

8. In your opinion, would a more general adoption of public conveyance result to the educational advantage of the State?

9. How do the people of your town generally view the matter?

The answers to questions 1, 2, 3, 4, 5, 8, and 9 are here tabulated:¹

Question 1. Per cent of school money used for conveyance.

There are 56 towns that use less than 5 per cent; 53 towns from 5 to 10 per cent; 14 towns from 10 to 15 per cent; 5 towns from 15 to 20 per cent; 4 towns from 20 to 25 per cent; and 1 town the full legal limit of 25 per cent.

Questions 2 and 3. The least and the greatest distance that any scholar is conveyed.

Distance in miles.	Number of towns.		Distance in miles.	Number of towns.	
	Least.	Greatest.		Least.	Greatest.
$\frac{1}{4}$	2	-----	$2\frac{1}{2}$	8	17
$\frac{1}{2}$	2	1	$2\frac{3}{4}$	-----	1
1	16	6	3	6	37
$1\frac{1}{4}$	2	2	$3\frac{1}{4}$	-----	2
$1\frac{1}{2}$	42	9	$3\frac{1}{2}$	1	11
$1\frac{3}{4}$	1	-----	4	-----	10
$1\frac{1}{2}$	4	-----	$4\frac{1}{4}$	-----	1
2	44	29	5	-----	3
$2\frac{1}{4}$	-----	1	$5\frac{1}{2}$	-----	1
$2\frac{1}{2}$	3	10	6	-----	1
$2\frac{3}{4}$	-----	1			

Question 4. General rule or regulation, or dealing with individual cases.

In 133 towns individual cases are dealt with; 10 have a rule, and 1 both.

Question 5. Cost of conveyance compared with that of maintaining local schools.

In 118 towns the cost is reported less; in 5, the same, and in 1, greater; of the towns that report the cost less, 26 give it as $\frac{1}{2}$ that of maintaining local schools; 8 give $\frac{1}{3}$; 7 give $\frac{1}{4}$; 3 give $\frac{1}{5}$, and 1 each give $\frac{1}{6}$, $\frac{2}{3}$, and $\frac{3}{4}$.

Question 8. In your opinion, would a more general adoption of public conveyance result to the educational advantage of the State?

One hundred and twenty-four school boards answer "yes;" 50 answer "no."

Question 9. How do the people of your town generally view the matter?

In 49 towns, favorably; in 83, they are opposed; in 8, divided; in 2, indifferent.

The following verbatim extracts from answers to questions 4, 5, 6, 7, 8, and 9 are made to show the trend of opinion among members of school boards and communities:

Question 4. Have you any rule or regulation governing amount to be paid or distance of conveyance; or do you deal with individual cases according to circumstances?

We pay 5 cents a mile each way for distance over $1\frac{1}{2}$ miles.

Six cents per mile for all distances over $1\frac{1}{2}$ miles and less than 2 miles; 8 cents per mile for 2 miles and less than $2\frac{1}{2}$ miles; 10 cents per mile for $2\frac{1}{2}$ and less than 3 miles; $12\frac{1}{2}$ cents per mile for 3 miles and over, for each scholar conveyed to and

¹ Summaries are here given of the detailed tables which appear in the report from which this inquiry is taken.—ED.

from school, the attendance to be shown and settlement made by the school register at close of term.

We recognize no demand for carriage if distance is less than 2 miles, but the rule is not arbitrary.

The Cheshire County convention of school boards thought 5 cents per mile in excess of 2 miles was fair pay, and we shall probably pay at that rate if we are called upon for payment, but we have no scholars to convey now unless we can consolidate the schools, which ought to be done.

Two and one-half cents per mile each way, based upon actual attendance, and in some cases special arrangement. No ironclad rule.

We pay 10 cents a mile.

Do not usually pay for transporting under 2 miles. A few special cases.

Our custom for the last few years has been to pay 5 cents per mile each way for each scholar living at any distance over $1\frac{1}{2}$ miles from the school, and they furnish their own conveyance. In some cases it is advisable to pay a little more than named.

Usually about 25 cents per day has been allowed to the parents for conveyance.

The scholars are carried by the lowest bidder.

The town decided the rate of mileage, which is 4 cents, going and coming to school; so the scholar that lives 3 miles from school is paid 6 cents in coming and 6 cents on returning, making 12 cents per day.

Have heretofore paid 50 cents per scholar per week. The town voted at the last annual meeting to pay 4 cents a mile for distance over $1\frac{1}{2}$ miles, distance reckoned both ways.

We tried a mileage system, allowing 3 cents per mile each way for distance traveled beyond $1\frac{1}{2}$ miles, but found we could not follow it in all cases, so we follow it in part, and for the rest we make the best trade for conveyance we can, according to circumstances.

Question 5. How does the cost, to the district, of conveyance compare with that of maintaining local schools?

It costs about $33\frac{1}{3}$ per cent of the expense of maintaining those schools which are discontinued on account of such conveyance.

There are several old school districts in this town where there are only 2 or 3 scholars in each. We find it much cheaper to carry those scholars to the adjoining school.

It costs about \$170 a year to maintain a school in the outside districts. We have conveyed from 3 to 5 scholars at an expense of \$69 for the year.

As far as we have gone, the cost of conveyance has not been more than one-third that of maintaining a school.

It costs about one-half as much to convey.

Much less, being about one-half.

Conveyance in nearly all cases costs less than half the expense of maintaining schools.

It costs not quite one-half as much to convey the scholars as it would to maintain a school.

From one-third to one-fourth the cost of a school.

Should say as a rule it would be less than one-half. Some years ago we consolidated two schools for a term, carrying the scholars of one school at an expense of about 40 per cent of cost of running a school.

Question 6. What are the advantages of conveyance?

Pupils in small ungraded schools are placed in competition with pupils in graded classes of from 30 to 45 pupils, thus stimulating them to greater effort.

Economy in expenditure, more interesting schools, enlarging and extending the general knowledge of the child by association with more children, from whom they learn as readily as from their elders.

Better schools, better teachers, greater inspiration for the scholars.

The scholars get benefits of graded schools.

Better interest, improved methods and facilities, more experienced and better teaching force.

Less cost, better interest on the part of the pupils than in very small schools, more money to lengthen schools.

It assembles more scholars together, thus causing more competition in scholarship; less when there are but few scholars; can give them better instructors; more weeks of schooling generally.

In our case, better school privileges; in general, one school of 25 scholars is better than 3 of 8, or 2 of 12.

It gives more weeks of schooling. Two of our schools are quite small, there being only 1 pupil in many of the classes. We think they do not have the ambition to try to advance as they do in larger schools.

Many of our schools, if we did not close them, would have only 1 or 2 scholars, consequently conveyance saves money and gives us more weeks of school.

Better teachers, more interesting schools, less money expended for wood and repairs on schoolhouse.

Larger schools and more interest.

More interest in larger classes in the combined schools. Scholars benefited by contact with larger number of their fellows.

Have larger and better graded schools and a higher grade of teachers better paid. A school of 6 pupils and a \$5 teacher is no school.

Better schools, better teachers, more interest taken by the pupils.

It gives us thirty weeks of school each year, for the past four years, against nineteen when they were not conveyed, and better instruction in the school to which they are sent.

We have some local schools with only 2, 3, or 5 scholars in them. The advantage is in making larger schools and more interest with better teachers, consequently a better education.

The child has more incentive to work in larger schools, takes less fuel, saves janitors' fees, provides a small salary to some needy farmer for carrying, and the child will attend more regularly.

Scholars can have better advantages for acquiring an education in schools that are graded than they can in the ungraded district school.

We get better attendance.

Putting the scholar who has been alone in his classes in with a class rouses his ambition, awakens his interest, and is a stimulus in many ways.

It gives the scholar better advantages than to have so many small schools.

Less expense; better schools for those conveyed. Combining schools aids in grading schools. Longer school year for all pupils. Better school supervision.

Better schools and better teachers.

Graded schools; better teachers; better appliances.

Question 7. Advantages of the local schools?

None, where transportation is feasible.

Better average attendance.

Scholars are nearer home. Parents claim they "Do not have to dress them so well." Local school holds up price of real estate.

Community pride. Don't want to see the schools going away from them.

Easier for small children.

We avoid criticism and friction.

The teacher can give each pupil more time.

The children are not so much exposed in all kinds of weather, and unless we build new schoolhouses are better accommodated.

No advantages. These schools are so small that experienced teachers will not engage them.

Convenience for people in the vicinity.

None, as compared with the larger schools.

Only to gratify those who want schools near home.

More convenient and satisfactory to parents, and generally greater improvement by scholars.

The school work is more personal.

Pupils live nearer local schools, and parents usually have more oversight of children.

None that I know of.

None in particular.

None except to very small children.

Better instruction and more regular attendance.

Short terms and few pupils. Some schools as small as 2 or 3 scholars, and not much interest taken.

Better in winter months.

When the scholars are very young and small, it is better for them to be nearer home and not have to ride a long distance in cold and stormy weather.

Local schools satisfy the people, build up local pride in their schools, help to build up personal responsibility, thus making strong, needed citizens.

There are none, unless the cost of conveyance amounts to much more than the cost of maintaining a school, and not then if the number of pupils is less than 10.

I see none.

Only to satisfy prejudices of parents.

There seem to be none.

Don't learn so much mischief.

I think the local school system for the country towns is all right. What we need is more money.

When there are a number of small scholars and the distance is great, possibly it might be advantageous to run local schools.

Keeps peace between the parents and the school board.

I do not know of any.

Little advantage, owing to small number of pupils; small classes; difficult to arouse enthusiasm or interest.

More individual attention from teacher; interest that always centers in a local institution.

The child can do many little things to help the parents and learn habits of usefulness that will be of great value to it in life; the teacher can direct the individuality of the child more. There are many things of more importance to a child than mere book learning; there is too much time between the teacher and the parents, too little time to work, when the child is carried to school, to form habits of industry.

The teacher has more time to give the scholars in small schools. The residents think that to close a school in a given district results in a depreciation of real estate.

Question 8. In your opinion, would a more general adoption of public conveyance result to the educational advantage of the State?

Possibly, as it would bring on a better system of grading in country schools.

I think it would. Advanced scholars should be conveyed to a central high school in every town.

Yes; it would give scholars now attending small district schools better opportunities for acquiring an education.

Be of very great advantage. This town ought to support only 4 schools instead of 8.

Yes. Generally a school with less than 10 pupils is necessarily less interesting than one that is larger.

In our town I would like to see all the 7 schools united in 2 schools, and think the advantages would be much better.

Yes; our schools would be from two to three weeks longer if the scholars were conveyed where they ought to be, with the same money.

Yes; most decidedly, from the very fact that our ungraded schools can not keep pace with our graded schools.

I am most decidedly of the opinion that it would be.

I am in favor of having the scholars come to the center of the town and have a graded school with only 2 teachers. There are only about 75 or 80 scholars in town of school age.

Question 9. How do the people of your town generally view the matter?

Favorably. This is being tried in our own town this term for the first time and seems to be the only thing to be done, and the prospect is that the results will justify the course we have taken.

Some families object to conveyance, while others appreciate it as an advantage to the children. Others say it lessens the value of real estate to have the local schools closed. Opinion is divided, but it seems to grow in favor of transportation.

In the case tried, and the one to be tried, the parents are well pleased.

They had rather have a school with three pupils in the woods somewhere and hire a teacher for them than to pay \$1 a week to have them carried to a large school.

A good many would like pay for carrying scholars to and from school. The school board have to put up a big fight with some of the parents.

There is a divided opinion. Some are very anxious to have scholars conveyed to another school and others oppose it.

The people who reside in divisions where small schools are maintained are very much opposed to closing such schools and object to having small children carried a distance from home. At the present time we have four schools in town which, in my opinion, should be closed. We can not afford good teachers for these schools. The people generally have several times expressed themselves on this matter in favor of the school board doing as they deemed best for these schools. The school

board have not closed these schools because the people would not like it, and they would gain ill will, etc.

Every scholar in town should have the advantage of our town graded schools.

About one-third of the town want one graded school. The rest wish to maintain good local schools.

Those living near the large schools have no sympathy whatever with those living farther away.

The townspeople think that every child old enough to become a scholar should be sent to school. If the parents can not convey them, or the distance is too great for them to travel, they should be carried at public expense.

The people generally do not like the idea of conveying children out of the home districts.

Only as they can see pecuniary gain to themselves.

We think the method of conveyance should be systematized, and a regular mileage paid to all scholars (not tardy) according to distance traveled per term, and made uniform throughout the State.

They are very rebellious. But by perseverance we have converted some. They are willing to admit, after a fair trial, that their children improve rapidly. In all instances we convey our scholars to the village schools.

They do not favor the idea. To express it as one of the parents did to me when I was trying to unite two schools of five or six scholars each: "If you convey the scholars, you will have to take the parents with them."

A good many think the children might walk, the same as *they* used to do.

I think the general view is for larger schools and better teachers.

The more intelligent people of the town believe that something should be done in this matter.

We think there are more in favor of conveyance than otherwise.

The majority believe in general adoption of public conveyance.

The districts that have been willing to adopt it see the advantage, I think; other parts, where it ought to be adopted, object. I think the people generally favor it.

We think there is quite a difference of opinion. However, we think a large majority favor conveying scholars in preference to maintaining local schools where there are but a small number of scholars.

Believe in having schoolhouses within lawful distance, and in furnishing funds to support them.

The people in the back districts stick for their schools. Remove the schools from these districts and property decreases in value. For instance, if a man is buying a home he won't pay nearly as much for one with school miles away, if he buys it at all. It would be better for the towns and better for the State to build up the rural districts than to break them down.

Their opinion or view is generally based on what they regard as their individual interest, local pride, and a desire to preserve the old landmarks.

They are not in favor of having their children carted for miles and being exposed to the weather.

Divided, but the feeling is growing for establishing a graded school. We live in hopes of better days.

I think our people are generally opposed to the matter, because we have not given it a fair trial. We shall reduce our schools by one this year to try it.

I think they are in favor of having schools united and conveying scholars.

They want the scholars conveyed.

Most of them approve of our course in conveying children.

The better element favors transportation, but a few families are found in nearly all divisions that are so intensely jealous of and spiteful toward the village that any attempt to consolidate is productive of a great deal of friction.

Village people and those not interested in education vote and talk against paying fair prices for conveyance.

We get rid of conveying pupils in various ways. We shut up schoolhouses and have small schools in private houses. We have hired mothers to teach their children at home, and sent children to near schools in another town. We believe that in every instance of this kind we have done the best thing for the children, and we have saved the town many dollars.

It does meet with favor.

Not very favorably at first, but after a while thought better of it.

The parents in outlying districts generally favor transporting. Others do not seem to care.

It seems to be the general opinion that fewer and better schools would be for the interest of the towns and the pupils.

Not favorably. If our parents could see the advantage of uniting some of our schools it would be the best plan we could adopt.

Getting fairly contented with the children being carried, especially along the line of the electric road, where children are picked up at the door and left within an eighth of a mile of the schoolhouse. Of course there are some who object strongly to carrying the children.

In different ways, as is the case in all country towns, but the majority of thinking people would come to favor the consolidation of the schools.

Majority in favor of conveyance.

Most of them heartily sympathize with it. A few cases are obstinately offended, but only a very few. We closed up three schools and ought to close two more.

They are conservative. But I have been doing personal work with the people of one of my small districts, and nearly all have of their own accord sent their children to the graded schools some 2 miles away, so it is only a question of a short time when we shall have no pupils left going to the district school. I advocate transportation in my annual report.

Public opinion has changed very much in the last few years in regard to the matter in this town. The people are more willing to let their children come to the village to school than formerly.

They insist on having a school in every district, and will not put the schools together until the State legislates on the subject.

Many with disfavor. As many prefer to do just as they did forty years ago.

If an annual appropriation from the State could be had, I think our people would be well pleased with one school at the center of the town, with three grades, three teachers, and convey all children there.

Probably the majority of the people in the rural districts would be opposed to the system of conveyance, but there is a considerable number in its favor, and that number is increasing.

With a death grip on their pockets and a jealous eye on any one supposed to have a little advantage in distance or other privileges. We ought to have two graded schools in town and bring all pupils to them.

They are in favor of having schools in every schoolhouse in town. Only in individual cases, where they are getting good prices for conveying, are they pleased. This business of conveying scholars is more trying to the disposition of the people than all other things.

On the part of most where they have had the local school they are opposed to closing it, fearing it will lessen the value of property, and because of the small children. Where the transporting has become a regular thing, and comfortable and safe transport, the objection grows less.

TRANSPORTATION OF PUPILS IN NEBRASKA AND INSTRUCTION IN NEIGHBORING DISTRICT.¹

[By State Supt. William R. Jackson.]

In order to ascertain what is being done with reference to this matter, the following letter of inquiry was sent to the county superintendents of those counties in which the law is applied:

STATE OF NEBRASKA,
DEPARTMENT OF PUBLIC INSTRUCTION,
Lincoln, November 27, 1900.

DEAR SUPERINTENDENT: From your annual report I learn that last year ——— districts took advantage of section ———, Subdivision V, of the school laws of 1899. I shall be pleased to have you inform me without delay concerning the following points:

1. The number of pupils transported under section 4b.
2. The cost of such transportation.
3. The number of pupils attending school under section 4c.
4. The number of months attended.
5. The total cost of such attendance.
6. Do you consider the law beneficial?
7. What are the obstacles in the way of a more general observance of the law?
8. Remarks.

The importance of the subject calls for all the information we can gather, and I shall appreciate your careful consideration of the above.

Very respectfully,

W. R. JACKSON,
Superintendent Public Instruction.

¹ 16 Bien. Neb. Rep. (1899-1900), pp. 40-43.

Twenty-one counties contain schools in which one or both features of the law have been tried. Four furnished transportation only, 4 transportation and instruction, and 13 furnished instruction alone.

Replies from part of the 21 superintendents show that 57 pupils were transported under the provisions of section 4b, at a cost of \$560. One hundred and fifty-eight pupils attended school in adjoining districts, under the provisions of section 4c, for an average of seven months, at a total cost of \$1,471.40. Those making the report are unanimous in the opinion that the law is beneficial. Following are some of the replies to the seventh question:

Not fully understood by people.

Local prejudice; ignorance of the true working of the law; object to sending small children in care of driver.

Most of our school districts are large, so that distance to school would be too great for further consolidation.

Generally the board wishes to furnish employment to some relative.

Law not explicit enough.

To induce the school boards to properly make and sign the contract. So much easier to neglect.

The law has not generally been understood.

None; but too great distance.

Difficulty of transporting very small children in bad weather. Desire of some people to be exclusive.

Under "Remarks" are found the following statements:

The law is a great blessing to our people, and 14 out of 36 pupils were transported by their parents free so as to get to a better and larger school.

I think the law will be very popular in this thinly populated county.

It has provided school for children in districts which could not maintain school otherwise, on account of the small number of pupils, or because of great indebtedness of the district, thus enabling the district to conduct a school and at the same time reduce indebtedness.

Mrs. Stelle Smith, county superintendent of Hitchcock County, says:

It furnishes larger associations and better instruction for the pupils. Financially, is more economical. The objections I have met are in regard to transportation; some argue that it would be too expensive and impracticable in the thinly settled districts; but I find that as the people get a better understanding of the law they are favorable toward it.

Supt. W. H. Rhodes, of Thayer County, offers the following:

The children in district No. 96 received nine months instruction at a cost of but \$190. It would have cost \$270 for a teacher's wages alone if they had maintained their own school. Both schools were helped because of increased attendance, and consequent interest and emulation. District No. 96 has never built a schoolhouse. The concentration of school districts must come in the future, and it is now a question of molding sentiment in favor of the same, so that a law may be passed which will make it easier to concentrate. Under our present system (without township organization) no district wishes to yield right of way to others, which is necessary in order to put the combination into effect. The Kingsville plan is O. K., and works out very easily when one board has contract of a township.

The department has repeatedly urged superintendents and school officers to avail themselves of the provisions of this law, but the inclination to be independent in fact as well as in name no doubt is the strongest barrier to overcome. The difficulty in inaugurating any new system where prejudice and long-established usages prevail is met here as well as in other matters. We believe, however, that the plan is a good one, and shall continue to advocate it. In time the people who now hold so tenaciously to the little inadequate home school will find that they can be better served and at less expense by taking advantage of the provision for uniting with another district. This will lead ultimately to the consolidation of districts and the maintaining of a system of graded schools in rural districts.



CHAPTER IV.

AMERICAN INDUSTRIAL EDUCATION: WHAT SHALL IT BE?

[Preliminary report of a committee of the Society for the Promotion of Engineering Education, made at the New York meeting, held July 2-3, 1900.]

To the president and the members of the society.

GENTLEMEN. Your committee on industrial education was appointed to make a report upon the educational means and methods which they are prepared to recommend as best adapted to advance the general cause of industrial education in this country. By industrial education we here mean that education which specifically fits one for an industrial vocation or profession. This report has no reference to educational methods in general, nor to those special kinds of training leading toward the fine arts and to the learned professions, other than engineering. Our problem is: What, in addition to the work that is now done in our primary and secondary schools, is it wise for us to attempt to do in schools of various sorts for those young people who are looking for employment in our manufacturing industries, or in commercial houses, or with our great transportation companies, or in those new or more or less original adaptations of material means to social ends, which are the peculiar problems of the engineering profession?

If the American people can agree substantially on what ought to be done, they can doubtless find the ways and means for doing it. The object of this report is to bring the members of this society into substantial agreement as to what is best to do.

Your committee are of the opinion that heretofore we all have relied too much upon the common schools and upon native ability. We have also conceived the generic American boy or girl as conditioned in a single way, and then have provided educational means and methods to fit this particular condition. But the average or generic boy is no particular boy, and his average condition fits few particular cases. We forget that they are particular boys who are to be trained to do the business of the coming generation, and these particular boys are of all ages, conditions, tastes, and capabilities. Your committee are quite agreed that in America every boy should find his career entirely open at the top. Society here is not to be stratified horizontally, but rather vertically. Our educational ways and means, therefore, must be planned for the purpose of helping every boy or man to make the most of himself, and hence to return to society the most he is capable of. But educational benefits can not be conferred upon unwilling subjects, neither does the wish always bring the opportunity. Our industrial educational advantages and opportunities, therefore, should be both attractive and available to all classes and to all ages. Any person wishing to improve himself, and to make of himself a more useful citizen, should find an opportunity for gratifying this high ambition. There are now in this country only the beginnings of systematic educational opportunities for young people to learn the theory and practice of particular employments for which they are fitted by nature and in which they long to become engaged. We have an excellent system of public and endowed schools, in which are more or less well taught the elements of knowledge and in which a very considerable mental capacity is developed.

After leaving these schools our boys know something, so far as knowledge can be gained from books and oral instruction, but they can do little or nothing. This mental, abstract, and memoriter education needs to be supplemented by a manual, industrial, industrial art, commercial, or engineering education if the boy is to become a doer, or a director. He then not only knows something, but he can do something, and because he can do something he is worth something to society. However much a man knows, he is a drone in the hive if he can not do something for the common good. It must be understood we are not asking for utilitarian education in place of a mind-informing and mind-developing education, but to supplement such cultural education as the boy or girl has been able to obtain. Neither do we care to insist upon young people availing themselves of this utilitarian education. We are only concerned that it should be offered, and we have every reason to believe that it will be a long time before the facilities will outrun the pressing demand for any kind of education which will enable a man to rise, in honor and in usefulness, in his chosen calling. We are not concerned to find the pupils, we are only concerned to provide the schools.

We are now to try to agree upon the various and sundry classes of theoretical and practical schools which are needed in every populous center in this country in order to meet all the educational demands now existing, to say nothing of the great increase in such demands as soon as we begin to meet them. While your committee may not quite agree in regard to the relative importance of the several classes of schools hereinafter discussed, they are in substantial accord in affirming that all have their place in any thorough and general scheme of technical education for American youth. These classes of schools will now be described and discussed separately.

I. THE MANUAL-TRAINING SCHOOL.

There has probably never been a movement in American educational methods which has effected such great changes in so short a time as this manual-training school movement. Growing out of the Russian educational exhibit at Philadelphia in 1876, and out of regular class shop instruction at the Massachusetts Institute of Technology, and still earlier class instruction in shops at the University of Illinois, at the Stevens Institute of Technology, and in the Engineering School of Washington University, St. Louis, the movement was given its American name, form, and significance as a means of general secondary education in the establishment of the St. Louis Manual-Training School in 1880. To Dr. C. M. Woodward, a member of this committee, is due the credit of both the name and the school as we know it in this country.¹ He also was the chief, and at times it seemed almost its only, advocate and defender. He, more than any other, has fixed it in America as a part of the general secondary educational training of a large proportion of our boys who are not drawn especially toward the so-called classical courses of instruction.

These schools need not be here described in detail. Suffice it to say they are intended for boys from 14 to 18 years of age, and they offer three or four years' courses. The time is divided about equally between manual exercises, drawing, and laboratory work on the one hand and regular academic class-room work on the other. No pretense is made of fitting for particular employments, and in point of fact but a very small percentage of their graduates become and remain artisans. A very large proportion of them go into higher education, a majority of these very naturally taking the engineering courses.

¹ It hardly need be said that Dr. Woodward is not responsible for the insertion of the above claim in this report. One member of the committee, also, objects to the mention of any name in this connection. The precedents as to shop-work instruction as here stated are more extended than they were in the report as read at the New York meeting. Hence much of the discussion which followed on this point does not exactly fit the text as given above. * * * J. B. J.

The arguments in favor of these schools are, first, that they at present draw their students very largely from those who otherwise would leave school altogether at about the age of 14 or earlier; and second, that for a very large proportion of city boys this is at present the best kind of a school they can attend at this age, no matter what they expect to do subsequently. For boys who expect to follow any industrial or commercial vocation, and who have grown up with little manual culture, as is the case with most city boys, the manual-training school offers real and permanent advantages. Here the whole boy is sent to school and not merely his head, as Dr. Woodward has so tersely expressed it.

While these schools can not be called industrial, since they fit for nothing in particular, they belong to the industrial class, because the graduates from these schools are well fitted to go at once into any practical trade or business and learn it quickly and effectively. The boys from these schools are not too old or too lofty to enter the industries in the most humble positions; in this particular they have some advantages over the graduates from our high-grade engineering schools. While many of them may begin as artisans, they soon come to be foremen, draftsmen, salesmen, superintendents, and the like, so that a census taken at any time will show very few of them in the artisan class. This fact, which is greatly to the credit of such schools, is frequently cited by shallow critics in disparagement of them; on the other hand, it has also gained for them the logical support of the artisan class, who at first were inclined to oppose them. Your committee are in substantial accord, therefore, in their belief in and in their support of the manual-training schools as now organized and operated. They would like to see these multiply until every boy can have the opportunity of obtaining this kind of education free of charge. The work should be adapted to girls as well as to boys. Thus for girls, cooking, domestic economy, sewing, dressmaking, etc., are introduced to offset the shop work of the boys. Whenever manual training is made a fixed part of the public-school system, however, they most earnestly recommend to all public-school boards a further development of the system as described under the title of

II. MANUAL TRAINING AND ART EDUCATION AS A PART OF ALL PUBLIC-SCHOOL EDUCATION, FROM THE KINDERGARTEN THROUGH THE HIGH SCHOOL.

This we conceive to be the ideal method of introducing both manual and art training into the public schools. In two or three of the lower grades sloyd work and simple hand-tool work might be employed alike for both boys and girls. Free-hand drawing also should be taught alike to all, and this should develop into graduated exercises of simple art designing, modeling, carving, water-color painting, carpet, wall paper, and furniture patterns, etc. Elementary needlework, cooking, and the methods of good plain housekeeping can be taught successfully to girls of the seventh and eight grades. If suitable manual work be distributed over the entire public-school period, it would occupy but a very small part of the average daily programme, and all such work would come as a rest and a recreation from the intellectual tasks assigned, so that instead of being a hindrance it would in fact be a stimulus and a substantial help in the regular class work. The bringing of these exercises into the regular school course would serve also to hold vast numbers in the schools who now lose interest and drop out for all sorts of frivolous reasons, which may be summed up in the two words, "lost interest." Some of our public schools are already moving in this direction. Perhaps the school which has realized this idea as completely as any is the Central School at Menomoneie, Wis. Here the management has had the wise counsel and the financial aid of a generous citizen, the Hon. J. H. Stout. He erected and equipped most liberally the necessary buildings, and has continued to pay the annual deficits in the expense accounts, but the city will doubtless soon be able to bear the entire expense, as the school has the loyal and enthusiastic support of the entire popula-

tion. Both the appliances and the instruction in this school are of the highest order, and the results are well calculated to astonish anyone who has never seen this system of public instruction in successful operation from the kindergarten through the high school.

This we conceive to be the ideal public school for America. It is expensive, for three reasons: The buildings and equipments cost large sums; the instruction is of a high order and must be well paid for; and more than both these, the attendance will be greatly increased in the last six of the twelve years of the course, thus requiring additional buildings, plant, and teaching force for these grades. To fully carry out these ideas, therefore, will greatly increase the running expense of the school's as well as the building and equipment account. And yet your committee believe that this is the goal which we should strive to reach. We must learn first to spend wisely the money now raised in our cities for public-school purposes, and then we must almost double the amount.

America is far behind Europe, and particularly France, in all matters pertaining to either fine or industrial art. The highest industrial rewards come for new labor-saving devices and for new art industrial designs. In the former we already lead the world, but in the latter we are far behind. Art can only thrive under conditions of general comprehension and appreciation. We need an art atmosphere. This requires time in which to educate the whole people along these lines, and to effect this the work must be done in the public schools. Even such artists as we have find a scant support, because the masses of the people can not distinguish between good and poor art, and furthermore they care little for art, either good or bad. We are coming to be the richest nation in the world and can well afford to enjoy the highest fruits of wealth, one of which is beautiful and æsthetic surroundings.

But this æsthetic argument will have less weight with our people at this time than will the economic argument which goes with it. The world is now so far advanced in its appreciation of the beautiful that good art pays wherever it is coupled with the useful. Artistic design doubles the value of the product, while it may not appreciably add to its cost of production. Almost all our artistic industrial designers now come from Europe. France fixes the fashions of the world because she is the acknowledged authority in art, and her supremacy in art is the very essence of all her material prosperity. But America is rapidly adjusting herself to this demand for more artistic productions, and the time is ripe for the introduction of this art-industrial education in both our public and in our privately endowed schools.

III. THE STATE AGRICULTURAL AND MECHANICAL COLLEGES.

These schools are now found in one form or another in nearly every State in the Union. Established originally under the several land-grant bills, most of them are now liberally supported by direct State aid, and they serve a very large constituency in the fields of agriculture, the mechanic arts, and engineering.

While the original purpose of the national appropriations was doubtless to train young men for actual practice in scientific farming and in other industrial pursuits, the students from these schools hitherto have very largely developed into civil, mechanical, and electrical engineers. Comparatively few of them have returned to the farms, but many of them are found in the management of our manufacturing industries. These schools all give regular four-year college courses in agriculture and the mechanic arts, but some of them have established short courses in agriculture. In Minnesota and in some other States, to the "agricultural college" has been added an "agricultural school." This is a true secondary industrial school in which the art and science of farming are taught to both boys and girls. It teaches suitable English studies, physics, chemistry, the raising of crops,

the use of fertilizers, animal husbandry, butter and cheese making; cooking, sewing and household economy to the girls, etc. This course is wonderfully successful. Most of these schools, however, have not entirely fulfilled the hopes of their founders in supplying the much-needed school training to farmers and artisans, which was the primary and original purpose of these enactments. Many of them do form a most important class of engineering schools, since they accept students from the leading high schools of their respective States, and give them a sufficient scientific and practical training to make most useful members of the engineering profession in those grades which make up the great body of practicing engineers. They are near to the people, are comparatively inexpensive, and are very largely attended. These schools have thus more than justified their cost, though many of them are not altogether fulfilling the purposes contemplated in the original enactments.¹

IV. THE HIGHER ENGINEERING COLLEGES.

These are strictly professional schools of a high grade, which teach both pure and applied science, and which rank with the best of their class in any country. Many of them are privately endowed and others are under the fostering care of the State, either as departments of the State universities or otherwise. In the training of professional engineers they are about all that could be desired; and they are now, and have been for many years, graduating young men who are as well equipped in both theory and practice as can be found perhaps anywhere in the world. These are to be the future leaders in the new adaptations of the laws, the forces, and the materials of nature to the service of man. These are the men who, after some years of practice, can safely be intrusted to solve new problems both successfully and economically. They are the safe counselors and guides of the capitalist in all new mechanical ventures, and they should be in constant demand by public officials, by boards of direction, and by individuals in all cases where large expenditures are to be made or where important definite results are imperatively required. The scope and purpose of these schools are, however, well understood by our people and they need not be further elaborated here.

V. MONOTECHNIC OR TRADE SCHOOLS.

These schools are comparatively new to the American people. They have long been in operation abroad, and are most fully developed in Germany. But the foreign pattern is not well suited to American needs. There a boy's career can be marked out for him in advance. If he is to be an artisan he is expected always to remain an artisan. The particular trade which he is expected to learn, also, is fixed for him. It is commonly that of his father before him or that of the prevailing industry of the locality. He is at best a sort of machine, an automaton, worked for what he is worth to the family or to the community and the State. His own individual development is not in question. Most commonly he is not even consulted in the matter. His future is his fate, and he yields to it as gracefully as he can. He has little opportunity to rise above the station in which he finds himself. His career is closed in at the top. Society is stratified horizontally. He finds such solace and comfort as he can by ministering to his bodily comforts and his domestic joys, and frets not over vain ambitions. In fact, ambition is a word of little meaning to him since it can have for him no satisfactory fruition. In these foreign countries, therefore, the trade school is primarily a means of more efficient and more economic production and only incidentally is it a means of personal development. Your committee believes that this result of trade-school instruction abroad is very largely due to the character of the people themselves and should not be charged against the schools.

¹ As to the purpose originally contemplated, see Rep. Com. Ed., 1899-1900, Vol. 2, Chap. XXIV.—Ed.

In America all schooling should lead primarily to the elevation and development of the individual, and only secondarily to a greater material prosperity. It is, doubtless, through a mistaken notion that the trade school does not do this, that this class of schools has made so little headway in this country. If we teach a boy a trade it is not only that he may practice it, but that he may become a master workman, an employer, a contractor, a manufacturer, a proprietor, a leader in his calling, and withal an influential citizen and a participant in public affairs. That a properly conducted trade school would lead to these results in this country can not be doubted. We should teach our boys many things besides the mere manual performance of a trade. In the trade school should always be taught some of the scientific theory which accompanies and underlies such performance. It is not necessary, however, to teach all these related subjects in the trade school. We shall continue to rely upon the public schools for the general education. The trade school with us must supplement this and not displace it. It remains for us to work out a system of trade schools suited to our needs.

The need for industrial training in the various practical vocations and trades is becoming daily more apparent. Not only are most vocations becoming more scientific and less traditional in their practice, but the wholesale introduction of labor-saving machinery and the abandonment in large measure of the apprenticeship system, leaves our boys and young men almost without opportunity or resource in entering successfully any of these practical callings. In addition to these inherent obstacles, the rules of the trades unions by which the admission of learners is limited to a very insignificant number, still further shut out young men from all lines of productive employment. In very many cases not even the proprietor's son is allowed to learn the business practically, or if perchance the permission of the union be extended to him to enter the works as a learner, he must beware of his steps, for pitfalls may be set for him at every turn and sometimes even his life may be in danger.

It has come to such a pass, in fact, that the avenues by which American youths can learn almost any practical calling in all its details are often absolutely sealed up. The only recourse is the teaching of all these trades and employments in especially equipped schools. If the would-be apprentice hopes to become anything more than an average workman he must learn the scientific and practical elements of his trade somewhere, and it is well established that he can learn them most successfully in properly operated schools. These schools should not individually attempt to teach too much; they should, however, teach the underlying scientific principles of one or two trades thoroughly, as well as the most improved commercial practice. The practice, however, is the most difficult to teach in the school. In the first place, it is hard to find persons having both the practical knowledge and the teaching ability. To impart practical knowledge rationally one must rest it on some scientific or rational basis, and not simply upon the dictum of tradition. This rational basis of trade practices is commonly either entirely wanting or, if it exists at all, it is quite unknown to the practitioner. His reasons for his doing a thing so and so are usually far from sound. Competent instructors in the practical trades are, therefore, very difficult to find.

In spite of all these difficulties, very efficient trade schools are established and others are called for by the proprietors and managers of various industries. At the last meeting of the American Foundrymen's Association, held in Chicago, June 5-7, 1900, a resolution was adopted calling for high-grade industrial schools to teach the science and art of founding. The school in clay industries started a few years ago at the Ohio State University has already resulted in the establishment of new ceramic works of very great promise. As a rule the expense of establishing and maintaining these schools should be met by industrial corporations, or by individuals, or by the joint action of manufacturers, locality, and State. Some of the more important industries now requiring such schools will be named.

1. The textile industries are among those which most readily submit themselves to monotechnic or trade-school instruction. Trade schools in these industries have long been common abroad, and a most successful one has been in operation for many years in Philadelphia and one for a shorter period in Lowell, Mass. A number of new ones have recently been established in New England. The State of Massachusetts makes a standing offer of \$25,000 assistance to any city or corporation in the establishment of a textile school which complies with certain requirements. In the higher textile schools the science of dyeing and the art of designing are taught as well as the practice in weaving and finishing all grades of fabrics. These higher courses are several years in length, and are best pursued after taking a high school or manual training school course. Even a college or an art school or an engineering school preparation before one enters the textile school is none too much if one wishes to fully master the industry, to understand mechanical and the power plants, and also to become familiar with the business departments of the manufacture and the sale of textile fabrics on a large scale. Many of the highest and latest developments of the science of chemistry find their application in the dyeing of yarns and fabrics, and the large dyeing and printing works in Germany have many chemists constantly engaged in studying new and improved applications of chemical knowledge to the textile industries.

2. The machine trades are at the basis of all manufacturing, and superiority in these very largely sustains our modern national prosperity. The fundamental principles and most of the practice of these industries can best be taught in schools having proper equipments. Formerly a great deal of hand work was done, and every journeyman in the shop was expected to be able to perform any task in the ordinary routine of shop duties. This demanded a long apprenticeship in actual shop practice and the acquisition of a high degree of manual skill.

The recent general introduction of automatic and labor-saving machine tools, and also tools of extraordinary size, has, however, created a demand for an entirely new class of workmen. Now the average workman in our large shops is only a machine attendant, and he is kept employed with a single class of machine tools. His business is to learn the capacities of these tools and to get the most work out of them of which they are capable. In fact some of our most progressive superintendents affirm that they prefer these narrow specialists to the old-fashioned all-around machinists. For a tool attendant of this class very little general training of any kind is required. With good instructions he will learn in a few days, or perhaps hours, to operate a machine intelligently, and very soon he will be working it to its full capacity. Trade schools are not a necessity for these men. This system carries in it, however, the seeds of its own destruction. By this system no one man is learning the business in its entirety, and hence no one is being trained to superintend or manage the business both theoretically and practically. The graduates of our colleges of mechanical engineering would make the most capable men for these higher positions of superintendence if they could be given an opportunity after leaving the schools to learn all the practical details of the business. It has not been possible hitherto to secure such men in sufficient numbers. On the one hand the managers of works have not been fully informed as to the benefits of such a course, and on the other the graduates of our schools of mechanical engineering are not always willing to begin at the bottom to learn the business. Failing of these, the graduates of our manual-training schools would serve very well for these positions of trust and supervision. These are more ready to enter the lower ranks of mechanical employment and work their way to the top. By a special kind of apprenticeship in the shops some of these young men would rapidly develop into very good foremen, superintendents, and managers. In many cases, however, the trade unions would seriously interfere with any free application of this sort of a programme.

Again, it must not be forgotten that many of our most ingenious and capable

machinists and mechanical inventors who have become the proprietors of the finest machine tool works in the world have had no special technical education, but have come up through the old system of apprenticeship. To save this class of talented young men to the business and to enable them to more fully master an industry now that the apprenticeship system has been practically abandoned, some means should be provided for giving them what the former system gave and which the technical and industrial schools are giving to their students. These men will not leave their employment and go back to the schools. Such schooling as they are ever to receive must be brought to them. It is probably true that many of the most capable of this class will now find some means of acquiring a technical education before entering upon industrial employment, whereas formerly apprenticeship was the only way open for entering these industries.

It is probable, therefore, that only a few of the untrained workers in the shops to-day will care to avail themselves of any school opportunities, however convenient, but these few are the ones who would profit most by such training, and whom society can least afford to lose from its high service. These may, with some technical instruction, become leaders and directors of their fellows and founders of new industries, and the rest may remain automatic attachments to their mechanical tools if they choose, without seriously impairing the success of the works and the local and general prosperity resulting therefrom. This is the hardest, though not the largest and most important problem your committee has had to struggle with. How are we to furnish adequate instruction to those young men who will have had no opportunity to secure a technical training, but who, after entering upon some industrial calling, wish to remedy this defect of early education? Such answers as we are able to make are contained in the next section of this progress report. Since nearly all industrial production to-day is mechanical, the solutions which are offered for the technical training of machinists will apply very largely to the workers in all lines of mechanical production.

VI. SUPPLEMENTARY SCHOOLS FOR INDUSTRIAL WORKERS.

These are schools for those bright and promising boys and young men who have from choice or from necessity already gone to work in some industrial calling with little or no scientific or technical schooling, as well as for those boys who can be reached by no other class of industrial or technical schools. The present demand for these supplementary schools is very large, but with the general introduction of manual, scientific, and art education into the public schools the demand for such supplementary schools will be very greatly reduced. The most promising foundations for the organization of these schools your committee believe to be the following:

1. *Proprietary trade schools in connection with industrial works.*—Nearly all lines of production are now organized into a few great manufacturing centers, and all the factories of any one class in the whole country are more than likely to be operated by a single joint stock company. This company shapes the industry over the whole American continent. We believe that it will be profitable in all these great industries to establish industrial schools in connection with all their large factories in which a few of their brighter workmen can be educated, not only in all parts of their business, but in the underlying and related sciences, in order to become capable foremen, superintendents, and inventors. These are at least a considerable proportion of the men to whom the stockholders must look for continued improvements, for skillful management, and for economic operation. After we have passed through the stock-jobbing stages of these new and mammoth combinations, we shall surely come around to this basis of most economic production and safe business management. The machine attendants will com-

monly be taken from the ranks of unskilled labor. These can be taken on and put off at pleasure, and they will be found in that large class of happy-go-lucky individuals who find self-improvement too laborious and confining, and who feel that sufficient to the day are both the good and the evil thereof. In those industries where perfection of workmanship is a prime essential, even the machine attendant must be a bright, skilled, thoughtful, attentive man or woman; and in these works some educational stimulus and some rewards for acquired skill and for fertile suggestions will be found to be not only fair dealing, but a most profitable business policy.

We are now passing rapidly through an evolutionary if not a revolutionary stage in these matters, and our general managers of large works are coming to realize the necessity of an educational side to their business. It is said of Americans that they are quick to see opportunities of improving their business and are ready to adopt any measure which promises a sufficient return for the outlay. Your committee feel that these proprietary schools in connection with industrial works will make their own way in this country without any organized campaigning, but some systematic effort to present their advantages will hasten their general introduction. Whether these schools take the form of night schools, of half-time day schools, or of financial aid to the brighter lads to attend some specific courses in a technical school, or all of these combined, is not now material. That all of our large industrial works and combinations of works should be brought to see it to their interests to furnish supplementary school facilities to their brightest boys is the problem which now presents itself to those who wish to further the course of industrial education in this country. It may well be that many manufacturing establishments will find it to their interest to work in conjunction with a correspondence school as described in the next section. Railway corporations, and large mechanical, electrical, and chemical manufacturing companies, will probably draw all their technically trained men from the regular engineering schools in preference to establishing technical apprentice schools. These are then given a few years of systematic shop and laboratory experience, which serves as their industrial apprenticeship. Some of our railway companies, however, are introducing elementary apprentice school instruction into their large construction and repair shops.

2. *Correspondence technical schools.*—These have sprung up like magic in America in the past ten years, and are now thought by many to be serving a great need. Whether they will remain in demand, or are only a passing phase of educational opportunity, may be a question. Until other opportunities of acquiring a technical training become practically universal, however, it is very clear that they will find a great work to do. The fact that a single one of these schools (the oldest one) is now carrying on its roll of students over 200,000 names is the best proof in the world of the great demand for technical education. These schools supply their students with specially prepared texts and have systematic correspondence methods of imparting instruction. If the student is willing to do his part, he may obtain in this way a very fair substitute for a school training. He lacks the stimulus, however, of a direct personal contact with a teacher and with other workers in the same subjects. This advantage can be partly supplied by a little encouragement from employers. Some establishments are now supplying rooms, fitted with drawing tables, warmed and lighted, where the correspondence-school students among their employees can spend their evenings in study. Where the numbers are sufficient the correspondence schools may eventually find it to their interest to supply local teachers. This would vigorously supplement the work of the correspondence school where it is now weakest. The entire absence of laboratory and shop instruction in correspondence courses, however, is a serious disadvantage, particularly in technical instruction.

An overwhelming majority of the students who begin these correspondence courses become discouraged, or find themselves overburdened, or else have not the requisite application, and so stop work in the early stages of their correspondence courses. This is not surprising when the persistent, systematic, and seductive methods of obtaining subscribing students are fully understood. Still the truth remains that if a young man really wishes a technical education and is willing to do his part, he can get a great deal of elementary assistance in this way, be he in the slums of a large city, or on a cattle ranch in Texas, or in the South African gold mines. And these necessities of the isolated learners will probably always make a large demand for correspondence instruction, no matter how general other means of acquiring a technical education may become. These schools are but another evidence of the quick initiative of Americans. The demand was no sooner felt than the supply was forthcoming in this new and original kind of a school. Such schools, however, can never supply the place of any of our regularly organized and equipped day or even of our evening technical schools.

3. *City and endowed evening schools.*—These are designed to serve young men who are employed throughout the day. They are quite similar to such schools abroad, most of the so-called technical schools of England being of this class. The student comes two or three evenings a week from 7 or 8 to 10 o'clock. He comes more or less worn out by his day's toil, and he reaches home long after his usual retiring hour, practically exhausted. His mind can not be alert with his body in a fagged-out condition, and hence this class of instruction is at once a great hardship and, in comparison with day schools, it is of relatively little profit. Men who are engaged in any kind of actual manual labor through the day are greatly handicapped in their attendance upon such schools. They are most valuable for clerks, bookkeepers, draftsmen, and the like. They can never become a very substantial element in the technical education of the industrial classes.

But besides the inherent weakness of these night schools, we find that many of them are not well taught. The teachers are changed from year to year, and there is no fixed policy or line of study. The teachers, also, are not commonly experienced in imparting instruction, and the whole atmosphere of these schools, especially in our city evening schools, is apt to be very far from stimulating and invigorating.

4. *Y. M. C. A. evening schools and Sunday technical schools.*—The Y. M. C. A. evening schools are now being organized under a competent central supervision and are pursuing fixed courses of study under much more competent and continuous instruction than formerly. These schools now instruct some 26,000 students in the United States, with a high average attendance. Their finishing certificates are accepted as evidence of sufficient preparatory work in about 100 institutions of college grade. Notwithstanding this proof of the great importance of these schools, their work is more with the mercantile than with the manufacturing classes.

Sometimes Sunday technical schools have been tried, but they are not likely to be very largely introduced or patronized in this country. Professor Woodward, who tried for four years in St. Louis the experiment of a "Sunday morning technical school," is of the opinion that such schools could be made very successful if properly equipped and made permanent in any industrial community; but an American community must first get used to the idea.

These supplementary evening and Sunday technical schools, therefore, can never serve as an adequate means for giving to young men in America a high technical development or in preparing them for a great technical service to the manufacturing industries. They are the only resource for a large class of wage-earners, and they should be encouraged and well supported, but they are at best a poor substitute for day schools, and they can not be regarded as anything like an adequate

means of self-improvement for our industrial workers. They are more efficient, when properly conducted, than the correspondence schools, but they can not reach the isolated student as the correspondence school does. Where the evening school is available, as it is in all our larger cities, it should be preferred to the correspondence school.

5. *Half-time self-supporting trade schools.*—This class of schools has recently been ably advocated by Mr. M. P. Higgins in the Proceedings of the American Society of Mechanical Engineers. Mr. Higgins was for twenty years in charge of the shop instruction given in the Polytechnic Institute, of Worcester, Mass. He states that the experience of that institution justifies the claim that well-equipped and officered industrial works—as, for instance, large machine-tool or engine works—joined to good technical schools, could be made to pay a very large proportion, if not all, of the shop expenses. In such a school the boys would spend half the day in the school and the other half in the shop. They would pay little or no tuition, but they would receive nothing for their work. The school would be divided into two sections, and these would alternate in school and shop work. A sufficient number of expert machinists would be regularly employed to oversee the shop work of the boys and to impart the shop instruction, while the theoretical or school work would be given also to both forenoon and afternoon sections by another set of technical instructors. In this way very nearly actual shop conditions could be introduced, and the advantages of the old apprenticeship system could be retained in addition to the further benefit of a regular school training.

If such a system of trade schools be practicable, they may go a long way toward furnishing a final solution to the great problem of the industrial training of the rising generation. It is to be hoped Mr. Higgins will find the means of embodying his ideas in an actual combined shop and school as he proposes, and so proving the practicability and efficiency of his plans by an actual test. For such a trial the most favorable conditions should be secured, the most competent instruction obtained, and the best possible shop equipment purchased. It is vitally important that the first trial of such a plan should be given every fair advantage to prove its worth. If it succeeds, as its chief advocate promises that it will, it may mark the beginning of as great a movement in industrial education as the manual-training school has done in general education. There is no middle ground between the expert machinist and the mechanical engineer. The difference is one of degree rather than of kind. These half-time schools would turn out expert machinists, many of whom might become skillful mechanical engineers. Your committee fear, however, that in some localities the opposition of the trade unions would prove fatal to all such schools engaged in regular manufacturing.

6. *Public libraries, and scientific, technical, and trade journals.*—We must not forget that every man who has come to anything is almost wholly a self-made man. This is particularly true in America, and applies to mental as well as to material acquisitions. The mental atmosphere which pervades our great industrial works is always bracing and sometimes stimulating. If free public libraries are not conveniently available, a free proprietary library and reading room at the works can readily be established. Here all the current technical and trade journals can be kept on file, and those employees who are capable of a large development will find here their mental nourishment. It is, we think, not too much to say that in almost every industry there are now books, technical and trade journals, and catalogues of a very high educational value, which can be continually added to at a small cost. If these reading-room facilities are wanting, therefore, any ambitious boy or man can take one or more of these journals, and by studying them and a few well-selected books he can acquire a very fair scientific knowledge of his calling. A generation ago these also were almost entirely wanting, so that then, with neither schools, nor books, nor journals, the only possible means of

acquiring a knowledge of any industry was through a long apprenticeship in the business itself. But now, if both the systematic apprenticeship and the technical schooling be wanting, there still remains a flood of printed matter in books and journals from which a young man can, if he will, obtain a very fair theoretical grounding in the manufacturing or commercial industry in which he is engaged.

VII. HIGHER COLLEGES OF COMMERCE.

These are common upon the continent of Europe, but have never obtained recognition in England or America. They are now being strongly urged upon our people, and a number are likely to be established in the immediate future.¹ In these a full four years' course of instruction of college grade will be given. The work will include a writing and speaking knowledge of one or two foreign modern languages; a wide acquaintance with commercial geography and the materials of commerce; full courses upon means and methods of transportation and the shipping regulations of various countries; commercial law and customs regulations, both foreign and domestic; the laws and practices of banking and exchange; political and economic science; mediæval and modern history; the history of commerce and manufacture; consular duties, regulations, and reports; international business law, and other subjects which can be taught and which will help to qualify a young man for a responsible position in a large business having foreign relations or as a United States consul. It will be to men having such an education that we must look for a successful competition with Germany in our foreign commerce. But we have already seen the necessity for these schools, and we may confidently anticipate their rapid and successful establishment. We must guard against making the mistake of merely grouping together a series of subjects now taught in our schools and calling that "a course in commercial education." The work must be technical and immediately available and useful rather than general and cultural. The subjects must be taught, therefore, in a way quite different from that employed in our literary colleges. This will require separate class organizations and very largely separate instructors when the school of commerce is made a part of an existing college or university. These schools will, therefore, be expensive. There should also be in connection with every such school a well-equipped commercial museum, in which are kept for examination and study nearly all the ordinary articles of commerce in both the raw and the manufactured state. These schools would then stand in a supplementary relation to the higher industrial and engineering schools. While the latter train the captains of industry, the former train the men to exploit the products of these industries in all foreign countries. In the development of our foreign commerce one is as essential as the other. With both, our material supremacy is assured for all time.

The above is offered as a hasty and provisional review of the field of industrial education in America and as a progress report of your committee. The committee has had to do all its work by correspondence, several of its members being out of the country at the time of this meeting. If the society decides to continue the committee, they will try to make a more mature report, with recommendations, at a later meeting of the society.

To assist them in their work they hope to secure at this meeting a general expression of the views of the members and of others who are exceptionally well-informed in these matters and whom the committee has invited to be present at this session and to participate in the discussion. The duties of the committee are not clearly defined, but we have assumed them to be the critical analysis of existing and pro-

¹ Such schools have now (Oct., 1900) been established in the University of the City of New York, in the University of Pennsylvania, Philadelphia, and in the University of Wisconsin, Madison.

posed methods of industrial education at home and abroad and the indorsement of those which seem to be best suited to American needs.

Respectfully submitted.

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EXTRACTS FROM THE DISCUSSION.

PRESIDENT MENDENHALL (by letter) stated that he * * * thought that the committee had made an extremely interesting and important report and that, in the main, he could subscribe cordially to every proposition. The principal danger which has to be confronted in this matter, and which apparently the committee has fully recognized, is that of magnifying the importance of what we may call the materialism of the twentieth century. Every effort seems to be pointed toward training young men and young women to acquire wealth, and this necessarily means less attention to the cultivation of those finer qualities that contribute, after all, more to the happiness of this life. However, this is a very large subject and no doubt it has received the committee's careful consideration. His own desire would be to guard very closely the real functions of the public school, which are considered by him not to include training for special occupations, but rather the preparation for citizenship, which is apparently so much lacking in these days.

Mr. H. G. PROUT,¹ said that there were two objections to the theory of special training or industrial education, one of them being that it will divert young men from following carefully and thoroughly the broader and more complete education which they would get in the technical and classical schools now established. A certain number of young men would be diverted, probably, because they could get more easily a certain kind of education which promises quick returns. This, perhaps, is not a very important point, because for every young man diverted in that way there would be two or three or a half dozen young men who would be tempted to take this industrial course who would otherwise get no education beyond that given in the high or primary schools. * * *

Another objection which we will hear raised to this kind of training, is that it will turn out upon the world many young men and young women who really think that they are fit to do something, and who are so far artisans spoiled, and have stopped short of being engineers, or whatever else is chosen. That is all true, too, but that charge is brought against all schools; and, furthermore, it is not a very serious objection in this country of ours, where effectiveness is a matter

¹ Editor of the Railroad Gazette.

of course, and where the ineffective man disappears pretty promptly, or finds out that he is ineffective. Of course, the committee are absolutely right in saying, as they do, and bearing down upon the point, that the main thing for all who are instructing is to continue to open up channels by which somebody will be educated who is not now definitely following any channels; that is, to open up a variety of ways of doing this thing. The great difficulty has been the belief that human history began with the Declaration of Independence and that the capacity to do something then descended upon every American. If in any way the necessity for precise training toward definite ends can be urged upon the people a great deal will have been accomplished. Therefore it seemed to him that the whole movement should be encouraged.

The speaker supposed that probably he was expected to say something as to what the railroads have done. He replied that, as a matter of fact, they have practically done nothing in this line. About twenty-five years ago the Lake Shore Railroad started four schools for apprentices, but they were night schools and open to the recognized objections. Only here and there would there be one select fellow who had unusual ability and good physique, who could do anything valuable at it. The Michigan Central also started something of this sort. They have several schools where they teach the boys something; they teach them drawing and simple mathematics, and try to give them a point of departure from which to go on and make master mechanics of themselves if they have the ability.

The Baltimore and Ohio went into an ambitious scheme of this sort, which collapsed with the failure of that company. A good school of this sort that is closely allied to the railroads is that of the Brooks Locomotive Works, established in 1883 by the public spirit of Mr. H. G. Brooks. They have quite a liberal method of helping their boys and the sons of men employed in the works, and it is believed to be doing a great deal of good.¹

In conclusion, the speaker wished to add that, during the last three to five years, it has been his good fortune to see a good many of the engineering colleges of the country, and that he was amazed to see the splendid work they are doing; it has been a liberal education to him. They are doing a grand work all over this country in the way of bringing up young engineers, and the effect of this work upon our country in the next fifty years is something that none can conceive or exaggerate.

Mr. M. P. HIGGINS said that this report, so ably and clearly covering the field of industrial education, was of special interest to him, and that he had read it with keen appreciation and great profit.

He believed that educators, engineers, and manufacturers will generally agree that no more important topic of education has ever been before the American people than the consideration of the future and immediate schooling and training of mechanics and workers below the grade of engineer, who are to carry on our manufacturing and mechanical industries. By "mechanics" he meant all who are engaged in the production of things useful.

The country is not likely to suffer through the lack of the highest scientific knowledge and ability of American engineers, but one can not speak so confidently regarding the rank and file of our workmen, machinists, etc. This lack of confidence exists despite the fact that American boys are superior in native ability, in skill, method, and invention, and this lack is solely because no adequate effort has been made to bring the best boys into the trades or to train them so that our country can hold the supremacy in machine building, in manufacturing, and in other lines of industries.

The common-school system seems to be nearly perfect for taking the boys up to

¹ See in this connection "Educational training for railway service," by J. Shirley Eaton, *Rep. Com. Ed.* 1898-99, Vol. 1, pp. 871-955.—Ed.

the high school period, but from this point up to the engineering schools the great masses of our boys who ought to be trained as superior, thinking mechanics are drifting aimlessly, and our shops and factories are being unsatisfactorily filled by foreign-born boys, whose mechanical ability is not equal to that of our native boys.

It is evident in the great industrial battle for future supremacy, under the inevitable system of intensified production, that our best boys with the best possible training will be needed; but, aside from this necessity, there is no field so promising and attractive as this for an unlimited number of educated, skilled workmen.

In our common schools there is the important element of manual training, but this training, as the committee truthfully says, makes no pretense of fitting boys for particular employments. There must be training schools for special employments, a training in skill and experience that shall be braced or supplemented by a good, liberal education and a degree of culture such as will develop the individual and attract our better talent into mechanical work. All this is possible by the cooperation of educators and business men in organizing a suitable system.

President Tucker says that the next advance in education must come from without the schools. The speaker thought it better to say that it will come through the cooperation of those without and those within the schools.

The mechanical schools, engineering colleges, and State universities have been so successful that they have gone above the needs of the people for industrial education.

The committee has said: "While the original purpose of the national appropriations was doubtless to train young men for actual practice in scientific farming and in other industrial pursuits, the students from these schools hitherto have very largely developed into civil, mechanical, and electrical engineers." They have not, therefore, fulfilled the hopes of their founders. This is because the working mechanic is not reached by these schools, and the speaker deemed it the object of this report to find a plan to give this important force of mechanical workers an education, a training, and a degree of culture commensurate with their needs and commensurate with the imperative future needs of the mechanical industries.

The report says: "The machine trades are at the basis of all manufacturing, and superiority in these very largely sustains our modern national prosperity." The speaker thought this to be true, and he wished that he had time to show the comparative importance of the machine trades and why this must be the basis of all industrial training.

Then comes a part of the report which he thought was wrong, or at least misleading. It reads as follows: "Now, the average machinist is only a machine attendant." In fact the machine attendant is not a machinist at all, and a machinist is not usually employed as a machine attendant, though he could do it much more effectively, and it might pay to employ him if he were available.

It is a great mistake and one that no person must be led into, to suppose that intensified production by modern methods (by automatic machines, piecework, and what not), does in any way reduce the demand for the skilled machinist or the high quality of his skill. No, it increases the demand and positively advances the requirements for his skill, as well as for his scientific and technical knowledge.

In referring to the machine operative, also, the report says: "Trade schools are not a necessity for these men." Now, this ought not to be said; or at least if it is done it must be because their needs must be postponed, because the classes ranking as machinists are so much more imperative in their needs and demands for immediate trade-school education.

As a matter of fact the machine operator, even, needs an education and a training, and it will pay to give it to him, and he will have an opportunity to obtain it

some time provided American educators recognize American needs and American chances for industrial supremacy.

Again, the report says: "The graduates of our colleges of mechanical engineering would make the most capable persons for these higher positions of superintendents if they would be willing to enter the shops after graduating from the schools and learn all the practical details of the business."

Now, in general, this is not reasonable to expect. In many cases the graduate thinks he can do better. In most cases he has been educated away from such shopwork for the sake of knowledge; in fact, he is rather too old and advanced for that sort of thing. A foundation can be put under a structure after it is erected, but the best time is at the time of its building.

The speaker wished to assure the educators, who are so ably equipped to consider such a subject, that they will be surprised and gratified when they come to gather up all the advantages of real, productive, commercial shop-practice and machine-building experience as an integral part of an educational course. Its intrinsic value is enough to introduce it at almost any cost; its educational value, as a means of strengthening the judgment and disciplining the mind, is of equal or greater value.

The report still further says: "The graduates of any manual-training school would serve very well for these positions of trust and supervision." * * * "These young men would readily develop into very good foremen, superintendents, and managers." But there is a gigantic IF in the way. IF they would enter the shops and learn the trade by "systematic apprenticeship." But there is no "systematic apprenticeship," and can never be in our system of American production. Therefore, because the manual training high school does not teach and does not profess to teach any special trade work and skill, it of course falls short of meeting the demands for a trade-school system.

What has been said in the report regarding night schools fully corresponds with the estimate of any careful observer. The night-school system, upon which England has relied and failed, is entirely inadequate to American needs, and is only a poor crutch to help, save in a few special cases.

The speaker had more hope in the principle of the correspondence system. In good hands and under good control this system is capable of great results among thousands who want training and who can not have the benefits of a real course in a trade school. In the city of Worcester, Mass., there are over 1,200 boys and men devoting their evenings and their money to this system. It certainly indicates a desire for learning, even if the plan is not the best one. He said that among his own men and foremen great progress in sound learning is being made with this system.

In this report there is a statement that is refreshing: "Your committee are quite agreed that in America every boy should find his career entirely open at the top." The speaker liked that "entirely open at the top." It suggests upward draft and feeding at the bottom. In this way the importance may be seen of vertical circulation versus horizontal stratification.

Herein lies the greatest hope, our greatest advantage in the industrial world when the great just conflict of competition is fully upon us—the conflict for supremacy through intensified production. But this is a subject for a whole paper, and not merely for a few remarks upon the general subject.

The speaker referred to one more thing in this report which shows the recognition of a fundamental truth. He left the mention of this idea to the last, because he thought it the newest and best. It is as follows: "The mental atmosphere which pervades the great industrial works is always bracing and sometimes stimulating. Upon this basis he had founded his estimate of the great value of a new and most important feature in our future industrial school system, viz, the shop lecture room.

The idea of the shop lecture room does not confine itself simply to having such a room in the shop building, but carries the idea of teaching much, if not all things, to the pupil in the shop, and while he is at his work, and in intimate, applied connection with his work.

The speaker declared its possibilities to be more than he had time to even mention.

The outlining of such a school plan as published in the Transactions of the American Society of Mechanical Engineers¹ is the result of the speaker's study, experience, and observation for the past thirty years. He thought that it is calculated to better meet our American needs than any plan he had found in this country or in Europe. The half-time school is intended to solve the important question in the family, "What shall we do for our boy?" This question arises thus: John is 14 years old; he has completed the grammar school. If he enters the high school it means four years more. This is often a very important question. The mother sees that, if John goes to work with a doubtful chance of learning thoroughly any trade, he practically shuts the door against future liberal education and culture. The father is earnest and willing to sacrifice heroically, so that John can go on for four years in the high school, although he does not know what the four years more in school will do for him; and so, in his perplexity, he says: "Yes, John, we can get on, I think, for four years in the high school. You will then be a strong man of 18. What will you do then?"

It must be admitted that the answer to this question is not a simple one, although it is a very important one. Now, imagine that John is able to say, "Father the problem is solved. The half-time school is now opened. In it I will become a skillful machinist, able to earn more than a living immediately upon graduation, and I will also have all the benefits of a high-school education at the same time."

The fondest, though hitherto the faintest, hope for a broad, liberal, scientific education dawns in view; bright, real, and possible, without charity or indebtedness; for John will be nearly or quite fitted for the technical or engineering school, which possibly he may enter at the age of 18, or after a year or two of money earning in a machine shop. This certainly would be a new and bright outlook to thousands and thousands of homes throughout our land.

Whatever success may be ascribed to the present methods of technical education, the speaker was confident that all who will study the subject will admit that something else is demanded; a system that will reach the greater number of our sons who should become working mechanics. This greater number can be reached by the proposed half-time school; a system that is recommended and urged because it will not conflict with present good working systems, because it will not duplicate the present common-school system, but will supplement it in a most practical and economical and effective way. And by this system it is confidently hoped to avoid what is the most obvious danger, viz, a failure to enlist and hold our better American youth to our mechanical and manufacturing industries instead of allowing these industries to fall into the hands of others less able to advance them.

PROF. R. S. WOODWARD said that it appeared to him that this report makes an era; that, as far as he knew, it was the first report brought to his attention that distinctly recognizes that there may be many kinds of education. Many will remember that, thirty years ago, there was only one kind of education that was recognized. Men who had been educated in the school of experience, from which there are no graduates, were looked down upon, and yet to-day the authors of the report under discussion have directed special attention to the names of two individuals who are not college graduates, but who will be admitted by all to be very highly educated men.

¹ Papers by Mr. M. P. Higgins, Nos. 850 and 864. Transactions American Society Mechanical Engineers, Vol. XXI.

Another point which struck the speaker as remarkable, is that the authors of the report are willing to recognize that there is more than one kind of liberal education. A few years ago it was thought that there was only one kind of liberal education, and there are a good many people to-day who assume to be able to draw the line very definitely between what is liberal and what is illiberal education. The speaker remarked that during the past two or three years he had met these people, and had sought to determine what their definition of a liberal education is, and, as far as he could find out, it is this—"The sort of education I have had." And the man who uses this definition is the man who has had a classical education. Certainly it is not to be said that the classical education is not eminently valuable and to be commended, but it is not well for any kind of education to secure predominance, and the splendid thing about the report under discussion is that it recognizes that there may be various kinds and degrees and forms of education in our own line which are all good as far as they go. * * *

MR. RICHARD P. ROTHWELL¹ wished to express his admiration for the report which had been made, and proceeded to speak about correspondence schools. One of the most important parts of the education which an engineer receives is the employment of his material where it will produce the maximum useful effect. The education which produces the greatest effect in the aggregate is the education for the masses, for the artisans and workers. There is, of course, no comparison between the numbers who are comparatively uneducated and those who are able to follow the higher branches of engineering or mechanics. The masses—the artisans and workers—are not able to attend schools after they have passed through the public school. Their first object is to earn their living by work in some useful occupation, and they find this to be so engrossing that they usually have no opportunity to study where they have the desire to do so. How to reach these people, how to make them more efficient workmen, and through them to benefit the entire industrial position of the country, is to my mind the greatest problem of the age. There is no question that the greater intelligence of the working classes, the higher will be their efficiency and the better and cheaper will be the product of their labor. The quality and economy of the products of industry are the foundation of national prosperity, and therefore it is desirable to commence with the education of the artisan and the mechanic.

There is nothing which so interests anyone as the occupation by which he earns a living. If one can show a man that if he does this or that he will be a more efficient worker and will earn a larger income from his labor, it will have a direct interest for him that no urging which he may get in the general school or college to acquire abstract information or knowledge will ever have. It is one thing to say to a young man, "Now learn this, for you will probably need it one of these days," and another thing to say to the man at work, "Learn this and you will be more efficient and will earn more wages." There is no doubt that if the proper means are brought to the working classes of the country a greater useful effect will be produced than by educating the higher classes, while, of course, nothing is to be said against that. The speaker remarked that he had the good fortune to study engineering in the best schools of two continents, and appreciates this fully. Yet when it comes to the question of producing the maximum useful effect with the means at command, greater results can certainly be secured by educating the masses than in educating the small number in the higher departments of engineering.

The correspondence school has one of the objections that have been pointed out, that it is a money-making institution, but this does not appear to the speaker to be a drawback. It is well known that when one undertakes to furnish something that people may take or leave, if he does not give the worth of their money he will

¹ President of the United Correspondence Schools of New York.

lose his own, for people will not buy his goods. Now, the fact that a correspondence school is under bond to the amount of its investment to furnish value for what it gets and will lose its investment if it does not, is certainly a strong guaranty that it will furnish more useful information than will the endowed school which furnishes free instruction, and that goes on whether it hits the mark or not.

There are not a few of our large colleges whose courses are designed by gentlemen of great learning, but who have never had to earn their living by labor in the occupations they are teaching. These gentlemen evolve more or less from their inner consciousness what a young man or woman should learn, and not infrequently when these young people get out in life and have to earn their living they find that they should have learned something very different. The best way to know what ought to be taught in any subject is to go to the men who are earning their living in that occupation and ascertain what will enable them to earn more. Teach them what will make them better workmen and able to earn higher wages. When you begin here and work from the bottom up I think it will be almost as much more efficient as the heating of water from the bottom up is more successful than trying to heat it from the top down.

The correspondence school is founded upon supplying the needs of the people who are taught, and any occupation can be taught by correspondence. It says to the workman, "If you knew more about your work, if you studied the reasons for what you are doing, you would be a more efficient worker, and you would be worth and would receive higher wages. Here are the means of acquiring that knowledge. It will cost you but little, and the payments are so distributed that they are easy to make, even for the low-wage mechanic."

I firmly believe that what men get for nothing they value lightly, and that where they have free schools they do not profit by them as if they had to pay something for their education. The speaker declared that a short time ago a gentleman who is much interested in educational matters said that he would like to devote a certain amount of money to free scholarships. He was answered: "Sir, we don't want them. If you will establish prizes for the student who makes the most progress in a given time, that is another matter, but our experience is that a free scholarship does not make a good student."

The teaching of the industrial classes is not difficult if one commences at the right end, by getting down among the workers and finding out what is actually needed to make them more efficient. With women the first essential is house-keeping. No class of mechanics ever struck for an advance in wages that, if they gained it, would have been nearly as important to them as it would be to have their wives and daughters taught how to keep house. Here is one great field for a correspondence school, for these women can not go to school, but they can learn by correspondence how to keep house.

The methods of teaching should be adapted to the people taught. The speaker doubted whether the very learned and able gentlemen who are teaching in Columbia University, and there are no better in the world, would at all make a success of correspondence education. To do this one must understand the people who are being taught. The secret of success is to find the men who can teach the industrial classes. These teachers should have been brought up with them and have learned how to teach them; should have, as it were, their range and be able to hit them.

The courses of most of the correspondence schools are good, some of them better than others, and all are bound to be, in the future, a great deal better than they are now. This is a very new departure, and yet the correspondence schools of this country, which were started yesterday, as it were, are teaching more students to-day than all the universities of the country. He said that the particular school with which he is associated, The United Correspondence Schools of New York, has already far more students on its rolls than has Columbia University in all its

departments; and yet it is but just beginning. No one would pretend to say that the education of the correspondence school is as high as that of some other schools, but each is adapted to its environment. The correspondence school commences with the assumption that the student in many courses knows only how to read and write. The instruction papers are prepared in direct, simple language, and are very accurate, for, with students by tens of thousands, each one of whom wants to know why, the answering of questions that a small number of errors would bring would swamp a school. The aim is, therefore, to have everything accurate. The assumption is that the students are ignorant people, who have studied little beyond English reading and writing, the beginning for nearly all being arithmetic. They go on with a certain amount of mathematics and then branch off into different specialties. If a man wants one line, he is instructed in that and nothing else. The instruction papers are sent to the students after they have paid their first installment, and each paper has a certain number of examinations in it. The students have to answer the questions in writing, and the answers are criticised and returned, with explanations to the student. The same with the drawing. It would surprise most of the members of this society to see the high quality of the drawing done by students at these schools. The drawings given them as models are very well done; the machine drawings especially are done in the very best style.

The method of getting these students, to which the report made some reference, is itself somewhat unique, and to some may seem undignified. It is the method adopted by the insurance companies. That is, in addition to the regular advertising, solicitors are employed to secure students. They are of the class of book agents; very glib of tongue and usually quite well educated and are very persuasive. They post themselves upon the subjects taught by the school, and as they get their living by securing students they are ready to convince those they address of the great importance to them of study and the value of knowledge in increasing their earning power. This may be undignified, possibly, but it is a remarkably effective means for spreading knowledge and inducing those to study who otherwise would never do so.

After he has secured a student the solicitor will keep him studying, because if he does not study he usually ceases to pay his installments and then the solicitor loses his commission. The way this often works may be described as follows: This glib-tongued school "fiend," who persuades the workman that he can not live or die without the knowledge he has to sell, has to deal perhaps with a fireman on a tugboat, who had not the faintest idea of studying anything before he met this agent; but the agent got him worked up and the man paid his fee of \$2 for enrollment. The next month the solicitor comes around and finds that this man has not made much progress, and is disinclined to continue, saying, "I cannot understand that; I can't make anything out of it." So the agent whose commission is at stake says, "Why, what is the matter with it?" and he sits down with Jim and instructs him. It is always in arithmetic that the difficulty comes. After the student has gotten over a few difficulties, even the most ignorant student can understand the rest; but the beginning is difficult for a man who has not studied for a number of years. Very many of them find it very difficult and stop there, but if this number were even larger in proportion than it is the number of those taught, and those who are induced to study who would never otherwise do so, leave the balance altogether to the credit of the system. It may not be dignified, but it is efficient, and that is better. On the whole the correspondence school is, in my opinion, the most important development of modern educational methods.¹

¹As to the methods and courses of study of railway correspondence schools, see Rep. Com. Ed., 1898-99, Vol. 1, pp. 903-907.—Ed.

CHAPTER V.

EDUCATIONAL PATHOLOGY, OR SELF-GOVERNMENT IN SCHOOL.

The pathological side of education receives more and more attention as civilization progresses. While formerly education for the masses consisted in the acquisition of elementary knowledge and the training of children normally endowed, it directs its attention now also to the unfortunate, the weak and depraved, and tries to save those for a life of usefulness who were formerly treated as criminals. Numerous institutions of recent origin, all having pathological purposes, bear witness to this benevolent educational movement. It is not only the blind and the deaf-mutes who are now treated rationally in State institutions, but mentally weak children, though gifted with the five senses, are in many places in Europe and America singled out and educated to the limits of their capacity. There is a double purpose in this: First, proper treatment is given to these children, who would otherwise sink back under neglect into confirmed idiocy; and, second, the schools are freed from an incubus that tends to retard the progress of all the pupils, since a teacher does not then need to waste much of her time on hopeless cases.

Other agencies are awakening to the necessity of healing and preventing social diseases rather than punishing and incarcerating dangerous elements that cause the disease or are subject to it. This is done by reform schools and other institutions, such as children's courts and homes of refuge for children in disgrace or distress. All this is analagous to the progress of physical hygiene. Formerly the State rather stamped out disease with fire and sword than prevented the spread of disease and epidemics by quarantine and actually preventive agencies, as is done now. This prevention of social disease assumes a variety of forms. In the last Annual Report of this Bureau an account was given of public playgrounds in city parks and of summer play schools designed to keep children from the influence of the slums, and to awaken in them higher and nobler ideals of life.

Viewing the efforts at pathological education in the various civilized countries, one can not help noticing how the form of government of a nation and its social ideals have a direct influence even upon these institutions of benevolent purpose. In Germany, for instance, where social classes still exist and a segregation into classes is promoted

by the very organization of the schools, the most popular remedy is found in separating the intellectual and moral weaklings and training and teaching them in separate classes and schools. In attempting to save children from a life of disgrace and crime Americans have in a few instances resorted to a form quite in harmony with our form of government by instituting what is known as "Junior (or Boys') Republics," the characteristic feature of which is self-government. All these attempts at reclaiming waifs, preventing crime, and saving moral weaklings are in their infancy, but the results thus far seem to indicate that the illustrious example of Pestalozzi in Switzerland has not been in vain.

A writer in the Literary Digest (Funk & Wagnalls, New York, No. 13, vol. 22) gives a review of some of the attempts at educational pathology under the caption of "Saving boys from crime." The article is here reproduced:

SAVING BOYS FROM CRIME.

The process of making good citizens out of bad ones, transforming society's liabilities into assets, is a work that always commands attention, and when the work is among children it seems to have an additional claim upon human sympathy. The record in this line that has called out the most remark, perhaps, is the boast made by the Children's Aid Society of New York City, that of the boys it has taken from the streets of the metropolis and placed on Western farms, 2 have become college professors, 22 lawyers, 12 clergymen, 9 physicians, 2 railroad managers, 2 governors, 1 a member of Congress, and a number members of State legislatures. Another interesting work that has progressed far enough to make a report is the juvenile court in Chicago, established in 1899. * * * Before it are tried all cases of children, dependent, neglected, or delinquent, under the age of 16. The court was patterned after a similar one in Massachusetts, and its record of a year and a half of existence has been warmly praised. The American Lawyer (New York) describes it as follows:

By the provisions of the law no child under 12 years of age can be held in a police station. A room for the detention of children must be provided. The law also enacts that under the age of 12 there shall be no arrests, but that the child shall be brought into court upon summons, and if the parent or guardian of the child ignores the summons he may be arrested for contempt of court. In the case of neglected children without parent or guardian the offender may be taken in charge by an officer and delivered by the court to a probation officer.

The court is empowered to provide for both dependent and delinquent children (by the former being understood children not guilty of offenses but without oversight and in need of it), being authorized to use its own judgment as to commitment. The child can be released upon the responsibility of the probation officer, or it can be committed to industrial or other schools. All offenses of whatever character committed by children under the age of 16 years come under the provisions of the law, which is modeled upon the Massachusetts statute.

The same journal says in comment:

It is useless to refer to the many-times-stated fact that our law is notoriously insufficient in so far as infants are concerned, in that it seems to recognize no real distinction between the juvenile offender and the hardened criminal. Crime is crime, it says, irrespective of the age of the offender, and the same hard-and-fast rules are to be applied whether the wrongdoer be a mischievous schoolboy or a hardened criminal. The reform school, while a step in the right direction, meets the difficulty only halfway, as the child comes from it with more or less of a stain upon its reputation which only time removes. The special need of a court which will not administer strict rules of law, but to which some latitude of discretion will be permitted in cases of infant depravity, is certainly apparent.

Mr. Carl Kelsey, writing in the current *Annals of the American Academy of Political and Social Science of Philadelphia*, says:

Appreciation of the value and importance of the court grows steadily. The judge had few precedents when he began and had to feel his way. To-day he is the enthusiastic advocate of the court. The other circuit judges who have acted as supply judges have become much interested in the court. Venerable Judge Tuley said: "The juvenile court is the greatest work of the kind ever undertaken in Illinois. More can be done in ten years in the juvenile to suppress crime than can be accomplished in fifty years in the criminal court." The State's attorney has said that the expenses of the criminal court have materially decreased because of the operation of the law. Before the enactment of the law there were constantly from 40 to 50 boys in jail awaiting hearing. During the last year only 37 boys were held for the grand jury from the juvenile court. * * *

If possible the judge will put the boy on parole unless home conditions are too bad, and if the record of the boy is fairly good. How successful this work of probation may be it is hard to say. Massachusetts seems satisfied with her experiment and other States are following her lead. Much has been accomplished in Illinois, though the probation officers are overworked. Imagine successful and satisfactory work with 100 boys paroled to 1 officer in addition to his other duties! Out of 1,339 delinquent boys before the court during the year ending June 30, 1900, 1,095 were paroled, and of these only 203 were returned to the court. There were also released from the city reformatory on parole 256 boys, of whom but 23 were remanded.

In New York City, in addition to the Children's Aid Society, the Gerry Society, and other similar organizations, a novel adjunct to the court of special sessions was started about three months ago and is being carried on by David Willard, a young man who is devoting himself to "settlement" work among poor boys in the lower east side, and who is also a teacher in the Tombs prison. The judges in this court have great confidence in Mr. Willard's judgment in the cases of boys and young men, and they parole all offenders between the ages of 16 to 21 for one month in his custody. "While the prisoners are on parole," says a writer in the *New York Evening Post*, "Mr. Willard inquires into the antecedents and environments in each case, and submits a report of his findings to the judges. When the date of the boy's parole expires Mr. Willard appears in court. If he thinks that the boy is not inherently bad or that he can be reclaimed he so reports, and asks that the prisoner be released under suspended sentence. The chances are that Mr. Willard may be able to report that he has secured employment for the offender; at all events the judge knows that a careful watch will be kept on the boy in future, and he almost invariably releases the prisoner as requested." Mr. Willard has investigated between 75 and 100 cases so far, and in the vast majority has requested that the boys be given a chance to reform. The writer continues:

Mr. Willard's work is done without salary. Besides his investigating work he has a little house on Chrystie street, which he has fitted up with eight small bedrooms, where he houses eight friendless orphan boys. As soon as he can find work for one of his "family," as he calls them, and the boy is self-supporting, he must "hustle" for himself and make room for another boy.

When he has room, Mr. Willard sometimes takes some of his paroled prisoners into his house, but he does not often have room. The house is supported by voluntary subscriptions. Sometimes the subscriptions do not come as numerous or as largely as are necessary, and then, as Mr. Willard expresses it, "We have to 'hock' some of our goods at the near-by pawnshop until things look brighter. We have dark days as well as bright ones in my family."

The charter-revision commission has recommended that a children's court be established in New York City, and it is not unlikely that this will soon be done; but as such a court will have to do only with children under 16, Mr. Willard's labors will not be affected by it.

The parole system, however, whether in a juvenile court or in the court of special sessions, puts the boy back on the city's streets, and, as Dr. D. L. Pierson says in an article on the *George Junior Republic* in the *Missionary Review*, "the city's streets are the devil's kindergarten." Another recourse is to place the boy

in some charitable institution; but this plan sometimes proves worse than the other. In his last annual report the secretary of the Children's Aid Society says:

It is an interesting fact that the children who have been most successful in their after careers were not the well-trained children from institutions, as one might suppose, but were mostly boys who had received their early training on the streets and were removed to better environment before they were 12 years of age. On the other hand, the very small number who were arrested for crime or sent to reform schools were in most cases children who came from institutions. The petty crimes they committed were largely due to want of worldly experience—a difficulty in distinguishing right from wrong.

Mr. William R. George, in his now-famous "George Junior Republic," just referred to, believes that he has found the path out of this dilemma. Mr. George started the little republic in July, 1895, and it now has about a hundred citizens, one-fourth of the number girls. Every citizen is paid for his work in tin coins, which he exchanges at the republic store and hotel for the necessities, comforts, and luxuries of life, or deposits in the republic bank. The citizens make their own laws, elect their own president, congress, judges, and other officers, and choose their own policemen, who lock up in their jail the citizens who break the laws. The plan has proved so successful that the Massachusetts State reformatory has adopted its principle, and two other junior republics have been started, one in Reddington, Pa., and the other in Washington, D. C. Mr. George's little democracy is located at Freeville, N. Y., about 8 miles north of Ithaca. A writer in *The Puritan Magazine* remarks that the Freeville Republic "for its simplicity, its decency, and its self-respect, may some day repay the study of the legislators of the larger democracy." Like Mr. Willard's work, the Republic does not seem to be embarrassed by an unmanageable surplus of funds, and all its leaflets announce that contributions of money, materials, clothing, or household articles will not come amiss, and will aid in extending the usefulness of the work. The Republic's last leaflet records the interesting fact that since the work began not one of the citizens has been dismissed as incorrigible, and of the 119 who have left the Republic not one has gone astray. Says the report:

Of the 119, sixty-one were considered by Mr. George positively bad when they entered the Republic. Many of them had been arrested and had served one or more terms of imprisonment in some institution of a reformatory character; others had committed thefts that would have sent them to a reformatory had they not been given the alternative of going to the Republic. Not one boy or girl who has left the Republic has been, up to date, in any difficulty with the public authorities since leaving. So far as Mr. George can learn, everyone is at some honest labor.

The foregoing allusions to the work of Mr. George are scarcely sufficient to give an adequate idea of the historic development and the administrative details of the Junior Republic. A more extended description is found in an article by John R. Commons in No. 3, Volume III, of the *American Journal of Sociology*, which is here inserted to show how the best remedy for social evils is self-help.

THE JUNIOR REPUBLIC.

The Junior Republic is an experiment in charity, penology, and pedagogy. It carries to a consistent extreme the principles of self-help and individuality toward which thinkers and workers in these fields for a decade or more have been urging. Various of its devices have been recently hit upon here and there in reformatories, schools, and child-saving organizations, but it has remained for Mr. George to begin at the foundation and to build up a complete system, untrammelled by traditions, institutions, or trustees. And now that the Republic has become famous, the fascination of its story and its apparent simplicity have led to the establishment of similar republics elsewhere and the adoption of certain of its features in

existing institutions. It is in the effort to imitate the Republic without fully appreciating its motive that discredit is likely to come upon its principles, and the conclusion to be drawn that only under the personal inspiration of a Mr. George can it succeed, or that it is anything more than the fanciful pastime of a harmless philanthropy. In order to show that it has been developed not as an amusement, but to meet the most fundamental practical problem of sociology—the education of personal character for both individual and social responsibilities—I can begin with no more convincing recital than the constitutional history of the Republic.

In 1887, Mr. W. R. George, then about 21 years of age, whose home had been among the hills near Freeville, Tompkins County, N. Y., went to New York City to follow a business calling. All of his leisure time he occupied in making the acquaintance of the street boys and girls of the East Side, in visiting boys' clubs, teaching Sunday-school classes, and becoming deeply attached to these urchins. Impressed by their cramped life, he determined, in 1890, to take a company of 30 to his home near Freeville, where he spent his own vacations in August. He secured railway expenses through the Tribune fresh-air fund, and relied upon his relatives and neighbors to furnish provisions. His only purpose at this time was to give the boys and girls a thoroughly happy outing. The second summer—1891—he took a company of 200, all to be kept on one farm in tents, and from that time to the present the number has ranged from 150 to 200, of whom about one-fourth have been girls. The people and churches of the neighborhood responded bountifully with food and clothing, and these were distributed freely among the youthful claimants. Four summers of this experience focused his attention on its essentially degrading effects. One-tenth of the children came there as a "gang," to fight and brawl and terrorize the country; nine-tenths came for the food and the clothing that they could take back to their parents. From arrival to departure their constant clamor was, "What are dese farmers goin' to give us to take back?" "The woman I was by last year gave me two dresses and sent us three barrels of potatoes in the winter. What are youse goin' to give me?" and so on. Here were two conditions for Mr. George to meet—crime and pauperism, the very life and moving spirit of the political and charitable system of New York City and its tenements. And the fact that 200 of these budding criminals and paupers were on his hands made him think. One day he remonstrated with a crowd of them, "Why do you do nothing but beg and demand things to take back with you? You have done nothing to earn them; they are not yours." A little Italian girl, spokesman of the crowd, drew herself up and said, "Mr. George, wot do youse tink we are here fur, anyway?" "That's the talk," growled the crowd.

The next summer, 1894, Mr. George determined to make them work for what they took. Boxes of clothing sent in by the philanthropic were no longer passed around, but notice was given that only hard work with pick and shovel would be considered a claim for such. The grumbling and muttering were general and ominous. One boy, however, after a period of thinking offered to work for five days for a suit of clothes—the price set by Mr. George. The others hectoring him a fool for working to get what was his by right, but when he walked away with his new suit, the pride of honest ownership, and the immediate capitulation of many others, were the first suggestion toward the Republic's cure for pauperism.

The problem of crime was equally hard. Mr. George made rules against smoking, gambling, stealing, fighting, etc., but how to punish for violations was beyond his comprehension. He even tried the whip, but that failed. He then resorted to a vicarious expedient, offering himself to be whipped and compelling the culprit to do the whipping. This worked better, but crime still flourished. Finally, in 1894, he inaugurated a public trial of every alleged offender, the decision to be awarded by the town meeting. On the suggestion of the boys a jury of the best citizens was selected by Mr. George himself for such trials. At this time, instead

of corporal punishment he substituted fines of a graded number of hours' work. The stone pile was superintended by an adult, one of the assistants, and when one day he was sick the boys proposed that in his place be appointed Banjo, a member of the "Park" gang, which was an offshoot of the famous "Why-ho" gang. Only necessity compelled Mr. George to accept this radical innovation and that but for one day, but its startling success was the first eye-opener on the possibilities of self-government. Banjo got much better and harder work out of the boys than did the adult, for they could not deceive him, and on the other hand Banjo himself became the most self-respecting upholder of law and order in the entire community. He was retained permanently in office.

The summer of 1894 was full of many kinds of experiments. Mr. George knew that something was wrong and he was feeling for remedies. After the children went home he set to thinking. Three facts had impressed themselves upon him. First, the keen sense of justice and power of discrimination shown by the boys in all the trials by jury; second, their superior powers of administration and discipline over their fellows compared with those shown by adults; third, the superior wisdom of the suggestions they had made in modes of government and administration compared with those which had occurred to himself. He therefore reasoned that they might equally well make the laws as judge and administer them, and the idea occurred to him of a boy legislature. Then, too, if they worked for their clothing, why not require them to work for their victuals? All these are just what people in the outside world are doing—why not copy their methods? And if so we have sure enough a republic—yes, indeed, a junior republic. The idea was a flash, an inspiration. It carried our enthusiast off his feet with a shout. At once he announced his plan, and the summer of 1895 was the first year of the Junior Republic.

But the self-governing republic was not born full-fledged. Mr. George was not ready to trust the boys. He made himself president, with a veto on all laws. He appointed adult assistants as chief justice, chief of police, civil-service examiners, board of health, and bank president. He let the contracts to adults.

The first summer convinced him that in every one of these positions the boys themselves would be superior to adults. They knew much better how to deal with their fellows. They would also be more responsible to them, and would give them, therefore, a keener sense of their own responsibility for the execution of their own laws. Consequently, in the summer of 1896 adults were removed from all responsible positions except the presidency and the boys were appointed by the president, and in 1897 another step toward democracy was taken, in that a boy was made president by election of his peers. In all respects, therefore, the Junior Republic is now self-governing and is a coalescence of the Federal, State, and city governments of the United States. The president is elected for one year, senators for two weeks, representatives for one week, and officials are appointed on good behavior. The laws of the State of New York are the laws of the republic, though subject to amendment by the legislature and the president. These amendments, however, are all abrogated on the 1st of July each year, and to remain valid must be reenacted.

While in the form of government the representative democracy has been perfected, the same does not yet hold for the ownership of property. This will appear from the very interesting monetary history of the republic.

In 1895 Mr. George was owner and business manager of all property in the Republic. He employed boys and girls, paying them wages in their card-board money (later tin coin), and they in turn paid him for board and lodging at the hotels. As a matter of form, and to give the government some material reason for existence, the citizen paid small taxes levied by the legislature, though Mr. George, as sole capitalist, paid the bulk of the taxes. In 1896, in order to extend democracy, the contracts for hotels and mercantile establishments were let by the

government to citizens on the payment of a license or percentage determined by auction. But Mr. George still retained ownership of the land and employed a large force in agricultural pursuits. He paid them wages daily, and as he had nothing to sell to the citizens, since his crops would not mature until after their return home the 1st of September, the money was not returned into his hands. As a result, the currency was expanded and continued to depreciate through rapid fluctuations until \$1 of republic money was worth only 5 to 10 cents of American money. The method of determining this depreciation was to note the prices at which clothing and other goods from outside would sell at auction to the citizens in their currency, compared with the customary prices for the same in American currency. The ratio between the two prices would give the rate of depreciation. The causes of this growing depreciation were for several months inexplicable to either the citizens or their patron. It involved serious problems in the distribution of wealth and the contentment of the citizens. Out of it sprang the heated political campaign between the People's Party and the Free Tin Party.

The government, being constantly in receipt of more money than it could use, owing to the growing surplus in the community at large and the feeling that something ought to be done to keep it in circulation, projected large public improvements, such as building highways, sidewalks, drains, and laying out parks. These were let to contractors, who, by paying their laborers 50 cents a day and foreman \$1, were themselves often able to make as profit \$150 out of the \$200 contract. They thus became "millionaires," and flaunted their riches in the face of others, living at the most expensive hotels without the need of work; and the high prices which they paid both depreciated the currency and placed luxuries beyond the reach of the commonalty. Rapidly there appeared a general feeling of remonstrance against these parvenues and a desire to curb their pride. Somehow it was felt that the excessive currency furnished them their opportunities, and the People's or Conservative party was organized, whose platform demanded a high tax rate and the arbitrary creation therefrom of a government reserve in order to contract the currency.

These speculators now, in turn, organized the Free Tin Party, and their popular appeal was "high wages, plenty of work, and prosperity." They told their workmen that they now were able to pay but 50 cents a day, and if currency should be shortened, they could pay only 25 cents; whereas, as everyone knew, it required a minimum of 50 cents a day to pay for meals, lodging, and taxes. These arguments carried with the voters, and the People's Party was overwhelmed. The currency continued to depreciate, and the millionaires to flourish till the end of the season.

In 1897 Mr. George took the matter in hand and returned to his policy of 1895. He became again sole landed proprietor and capitalist. He considers this as far from the ideal, but as a means of regulating the currency it is the only secure plan yet devised. He now pays directly, or through his subcontractors, all the employees except government servants and pays two-thirds of the taxes. He receives an income from the hotels and other sources, and consequently is able to control the currency at par, apart from the regulations by the government. The inference seems to be that popular sovereignty has failed in the field of the currency, just as we often hear it held that it must also fail in the greater Republic outside.

By owning all the industries Mr. George is also able to check the rise of millionaires. He can prevent the merely shrewd and unscrupulous from accumulating wealth as against the industrious and honest. He does this by letting the contracts not merely on the basis of the strict competitive system, as was done in 1896 by the government, but by awarding them to the more deserving in his pri-

vate estimation. Thus, by monopolizing private property, he quietly controls the lives of the citizens, regardless of the complete self-government vouchsafed to them. In this a more ideal justice is measured out, though, of course, in so far, the government has become a benevolent despotism rather than a democracy. This, too, has made the republic less fascinating and less exciting than it was under the political and commercial contest of 1896, and outsiders might wish these competitive conditions had been retained in order to see what sort of an ideal commonwealth the citizens themselves might have worked out. Both Mr. George and the citizens feel this lack of complete self-government, and the plans for 1898 will resume again the democratic trend. Private property in land and all enterprises will be arranged for in some way, and the government will have entire control of the volume of currency.

At present the currency is easily kept at par, as far as the purchase of necessities is concerned. United States money has, of course, a wider value; but if the treasury of the republic had an adequate reserve of candy with which to redeem its currency, the par value of the same could in all respects be steadily maintained. The management wishes to arrange for the redemption of certain portions of its currency in United States money when the citizens return home, but at present the only redemption for the savings of the citizens is such clothing and provisions as may happen to be on hand. The outgoing citizens occasionally retain their republic money and bring it back the following summer for a few days of luxury before settling down to work.

The demoralizing effect upon the community occasioned by the millionaires and their sudden riches would be largely obviated if the government had other means of redemption than merely meals and lodgings. If the millionaires could purchase clothing, shoes, pictures and bric-a-brac for adorning their rooms, books, and other useful imperishables, they would still feel the incentive to work, even with a large surplus of profits in hand, for the surplus would be turned at once into such permanent acquisitions. As it is, the only use to be made of large earnings is to spend them on meals and lodgings throughout a long period of idleness. If the imperishables were donated by outsiders, or even manufactured in part by the citizens themselves with machinery and a plant like those of many prisons and reformatories, Mr. George would see his way again to return to the individual enterprise of 1896. It is toward this ideal that his new plans are tending.

New counterparts with the republic of history are continually appearing. The duration of the republic was originally the two months of July and August. Beginning in the fall of 1895, there were five of the summer citizens who persuaded Mr. George to keep them through the winter until the next summer. These he calls his "original residents." They were the nucleus of a colony of 32 in the winter of 1896-97 and of 53 in the winter of 1897-98. These winter citizens, known as "residents," continue the government through the year under the same constitution and laws, but they have become a patriciate, engrossing the offices, the property, and profitable contracts, to the exclusion of the greater number of plebs, known as "summer citizens," who swarm in during the summer. The winter residents elect the president who appoints the administrative officials, and the winter of 1896-97 they adopted a new constitution, providing that no citizen could be a senator or representative who had not been a resident of the republic for one month. This, of course, excluded the leaders of the summer citizens during the first half of their stay, and since during this first month the majority of these leaders were arrested and convicted on criminal charges, they were further incapacitated for election the second month. The outcome has been that the summer citizens, having three-fourths of the votes, have cast their strength for the weak and inefficient winter residents instead of the capable leaders, and the legislature has therefore been almost a nonentity. This is very like ward politics at large. The residents of 1897-98 are planning to remove the

restrictions on summer citizens, and this will again tend to give the political life of 1898 some of the thrill of 1896.

The main obstacle at present to the successful working of the educational and reformatory principles of the republic is the inroads of summer citizens. Experience shows that at least a year's continuous residence is required to saturate a boy with the spirit of self-help and responsibility. The first month or two is a period of depression and discouragement. The boy is arrested and convicted again and again, spends much of his time in jail and on the stone pile, and only begins to reap the rewards of upright and industrious living at about the time he goes home. The boy who stays through the year gets a closer acquaintance with Mr. George and becomes a model citizen. It is intended to increase the number of residents and lessen that of summer citizens, so as to give a preponderance of at least three-fourths of the votes to the former; also to establish another "state" near by exclusively for the summer citizens.

The republic is based upon the wage system. This is a system of indirect coercion, though corporal punishment and despotic control are based upon the slave system. The indirect coercion is far more efficient both as an industrial stimulus and an educational device. It is deliberate and searching; it stimulates thought and self-examination. I saw two boys go without breakfast because on the day before they loafed, and so failed to earn cash for a day's meals and lodging. Mr. George himself escapes the odium of enforcing this harsh penalty, for it is enforced by the boy proprietor of the hotel, to whom it is a matter of business.

In 1895 taxes were levied to support the poor. Finally a bill was introduced in the legislature and enacted into law stipulating that after a certain day the paupers' table supported by the government should be abolished. There were a dozen paupers who had contented themselves with the spare diet of that table. They treated the matter as a joke and predicted that when the day arrived the citizens would do what the charities of New York had always done—feed the hungry, whether deserving or not. But the citizens were taxpayers. When the day arrived the policemen ordered the paupers to move on. They moved, and before night had found work and earned enough to pay for a heavy supper. Since that day there have been no paupers. Of course there is no problem of the unemployed in this Junior Republic, and so the paupers can not throw the burden of proof upon the philanthropists.

If the wages were uniform for all grades of labor, it would be no better than slavery as a means of individual progress. But by grading the pay according to the quality of service, higher motives than the craving for necessities can be evoked. The minimum wages paid by Mr. George are 12 cents an hour for six hours' work, or 72 cents a day. Curiously enough, when boys employers they pay 10 or 15 cents a day higher wages, but they compel their employees to work harder and somewhat longer. Policemen are paid 90 cents a day; the chief of police \$1.25; senators and representatives \$2 a week; police commissioners and other officers \$1 to \$2 a week. Civil-service examinations are held by the civil service commissioners for the policemen and all appointive officials. The examinations cover the common branches of study as taught in the public schools and at the republic.

As is apparent from the foregoing, self-help, self-activity, mutual supervision and control—in short, self-government—are powerful agencies of pathological education. This is likewise shown in the success of the "Cottage row" at the farm school on Thompsons Island (in Boston Harbor). An excellent account of this institution and its methods is found in the *New England Magazine*¹ (No. 2, vol. 22), where Prof. Max Bennet Thrasher, for two years connected with this school,

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describes the managements and methods in vogue. A part of the article is here inserted:

GOVERNMENT OF BOYS, FOR BOYS, BY BOYS.

The farm school [originally the Boston Asylum for Indigent Boys] is limited to 100 pupils. Boys are taken between the ages of 10 and 14 years and retained until they graduate from the school department, the training there being equivalent to the best grammar school. At the same time they are taught to work, the aim being to fit them so that when they are old enough to go out into the world they will be fitted to meet and grapple with the problems which life will present. As soon as is practicable after graduation places are found for them in offices, stores, shops, or on farms according as their training or natural ability seem to make most desirable. Boys who have committed crime, or are what may be termed bad boys, are not received. The farm school is in no sense a reform school, but rather a home training school for the boys who are under its care. These are usually orphans or the sons of poor widows who, from force of circumstances, are unable to provide a home for some or all of their children.

In addition to the regular course of study there is a manual training course which includes mechanical drawing, carpentry, wood turning and carving, blacksmithing, and printing. All the boys are employed in turn upon the farm for a considerable portion of the time they are at school, obtaining from this and the use of the boats, which they are constantly taught to use and manage, the very best physical exercise. In addition, all in turn perform some part of the household duties, including cooking, baking, the making and mending clothes, and laundry work. The boys have the freedom of a campus several acres in extent and a large and thoroughly equipped gymnasium.

There is no instinct stronger in the minds of children than that of imitation, and no amusement more universal and enduring than that of playing house. My observations at Thompsons Island lead me to believe that while baseball and football, King Philip, tag, quoits, bows and marbles, and a dozen other games came and went, the one interest that never flagged was that in "Cottage row," the city of playhouses which the boys have built, care for, own, and govern. Each election for mayor, aldermen, and chief of police and other officers is just as warmly contested as the last, and when a boy leaves the school he never has any trouble in finding some younger boy to buy his shares in his cottage, while political aspirants for such official positions as he may have held spring up as suddenly as they do in large municipalities.

The settlement originated in this way: During the summer of 1888 the boys were given some pieces of cast-off bedticking to play with. A chance suggestion was made that these would make good tents. The suggestion was adopted, and several tents were set up, each being owned and occupied usually by a number of boys. Scattered at first irregularly over the campus, the tents were eventually arranged in rows at the north end, and all through the summer this was the favorite part of the playground. As the cold weather came on the boys were so reluctant to abandon their little homes that they utilized pieces of board to make them habitable as long as possible. This gave some of the boys an idea to be acted on another season, and when the spring of 1889 opened some of the most enterprising planned to erect a wooden cottage. With the assistance of the superintendent, material was obtained and the house was built. Others followed, and from this beginning the present "city" has developed. The fact that all of the boys who are old enough take the school's course in manual training makes it possible for them to do all of the work themselves. In 1891 it was decided to be best to limit the number of cottages to 12, the possession of each cottage being divided into 12 shares. Certificates of ownership were given for these shares, transferable through the farm school bank. This bank has been a regular feature of the school for some time. The boys deposit

in it whatever money they may earn or have given them and are paid interest on deposits above a certain amount. Each boy has his own bank book and is furnished deposit slips and checks. If he wishes to buy anything, or to pay out money for any purpose, he draws his check as any other business man would do. Mock deeds of the cottage lots are given to the proprietors. The plan seemed to work so favorably that in 1893 the superintendent of the school issued the following proclamation:

Proclamation.

To the Inhabitants of Thompsons Island:

The playground settlement shall be known as "Cottage row." The government organized by the property owners shall be for the general protection, advancement of good order, adjustment of individual rights, and to assist in teaching the duties of citizenship. All matters pertaining to Cottage row and its government shall be entitled to and given the same respect as is due other branches of the school work.

The officers of the cottage government, consisting of a board of aldermen (3), clerk (1), police (3), street commissioner (1), and jury (5), shall perform their duties with the dignity becoming officers in such positions.

The board of aldermen may elect a janitor for the Cottage Row hall and clubhouse and a director for the Natural History room.

The property owners shall obey and respect their superiors in said government; but when circumstances warrant may appeal to the officer in charge or to the superintendent, as in other matters.

CHARLES H. BRADLEY, *Superintendent.*

An election of officers followed the issuing of the proclamation, and long afterwards a city hall 6 by 10 feet was built to accommodate the newly organized government. Another building somewhat larger was erected and called "Audubon hall." This is for a home for the numerous pets which the school possesses, including a monkey, an Angora goat, pigeons, rabbits, and guinea pigs. Three curators are appointed to take care of the animals, under the direction of the board of aldermen. Since the organization of the government the official force has been increased by the addition of a mayor, an assessor, a judge, and a librarian. All of the officers except the judge are elected. The elections have been held once in three months, on the first Tuesdays of January, April, July, and October. A caucus is held one week previous to the election. The ballots used are printed in the school's printing office by the boys and resemble as nearly as possible those prescribed by the Australian system. The judge holds office during good behavior or as long as he is at the school. There has never yet been an instance of a judge having been removed from office.

One of the features of the farm school which has been found very helpful is a small monthly paper, called the Thompsons Island Beacon, written, edited, and printed by the boys. As they naturally choose subjects to write about in which they are interested there have been a number of articles in this paper at various times pertaining to Cottage row. I do not think any description which I could write could be more interesting or more accurate than the descriptions in these articles, and I therefore quote from some of them. The first article gives a very complete account of the machinery of the city government. It is from the issue of March, 1898:

Cottage Row government.

Our principal officers are elected quarterly by the citizens. The mayor is the supreme officer, and it is his duty to preside at the meetings of the citizens, to enforce due observance of the constitution, and to look after the government in general.

The board of aldermen are the mayor's advisers. They assist him in performing his duties, and their chairman takes the mayor's place when absent.

The judge, who holds his office during good behavior, tries all cases, instructs the jury, and passes sentence.

The police department of our government is a very interesting feature. The

citizens elect the chief of police, who chooses his two patrolmen and two detectives. They have a general supervision over all the boys in Cottage row and on the playgrounds, whether citizens or not. All complaints are made to the chief of police, and after looking into the case he applies to the judge for a warrant, and if this is issued makes the arrest. The judge has charge of the case afterwards. At the proper time, within two weeks after the complaint is made, the judge calls the court to order, and the trial begins. Our trials are very interesting, both sides having their lawyers and witnesses.

The street commissioner, who is elected by the citizens, has charge of the appearance of the row. The cottages are divided into three wards, and a waste barrel is placed in each of the wards. It is the duty of the citizens of each ward to take turns in emptying the barrel, and if a citizen fails to empty in his turn, he is tried and punished. All the citizens are on the same level in this line.

It is the duty of the assessor to set a value on all the cottages and raise it on all improvements.

The city clerk, who is appointed by the mayor, has to make note of all that takes place in the government, such as keeping a strict account of all the shares in the cottages, issuing all certificates and deeds, and making out the minutes of all meetings of the citizens and of the court. His desk, which is in the city hall, contains note heads, envelopes, certificates, and deeds, all of which are printed in our printing office. The clerk also acts as treasurer and has care of the government funds, which are deposited in the farm school bank.

The citizens meet every three months for a caucus and election. The board of aldermen meet about every two weeks, so the affairs of the government are well looked after.

As our city hall is not large enough to accommodate all the citizens, our meetings and trials are held in the large schoolroom, visitors always being welcome. The presiding officer uses a gavel which Mr. Bradley presented to Cottage row, made of wood which he got at Mount Vernon, Va.

Another interesting feature of our government is Audubon hall, the headquarters of the natural history society. It contains rabbits, guinea pigs, a white Angora goat, and an African monkey called "Mr. Stubbs." The hall is very carefully looked after by three curators, who are under the supervision of the board of aldermen.

HOWARD B. ELLIS, *Clerk.*

Another boy, in the issue for May, 1898, writes of his duties as chief of police:

Police department of Cottage row:

I am chief of police of Cottage row. I have two patrolmen, Chester O. Sanborn and Samuel W. Webber. Our duty is to keep order on the playground and on the grounds of Cottage row and to see that no one breaks windows or does anything that would disturb others or prevent them from having a good time. Anyone who offends in this way is arrested and tried before the court. If found guilty, he is punished by being compelled to stay away from the cottages for a certain length of time or is deprived of the privilege of holding office or punished in some similar way.

WILLIAM C. CARR.

In the June number of 1899 the boy who has succeeded the one whose article I quoted first as clerk describes a Cottage Row election:

Election of officers for Cottage row.

Cottage Row officers are elected once in three months. A week before the election the voters hold a caucus in which are elected nominating committees. The mayor chooses three boys who are to serve on the mayor's nominating committee, and the citizens chose three boys who are to serve on the citizen's committee. These committees each nominate enough candidates to fill the offices. Both committees send in their reports to the clerk who has the ballots printed. On the ballot under each name is a letter "C" or "M," which tells by which committee that boy is nominated. Sometimes one boy is nominated by both committees. The election takes place a week after the caucus. It is held in the first schoolroom. Each citizen takes a separate seat so that no two will be together. The ballots are then passed out. After the citizens are through voting the ballots are collected. Then the mayor, aldermen, and clerk count them. This takes quite a while. During the time the ballots are being counted the citizens take a recess. When the ballots have all been counted the meeting is called to order, and the clerk reads the result of the election. First, he reads the names of all the boys

who were nominated and the number of votes each received; then the names of the boys who were elected. Last of all, the boys are sworn into office. The judge swears the mayor in and the mayor swears the other officers into office.

WILLIAM AUSTIN, *Clerk*.

The caucuses, elections, and courts are held in one of the schoolrooms, in order that all who wish may be present. Of course, only boys who are property holders vote. Ownership of one share admits a boy to all privileges. Usually from three to five boys own a cottage together. All the meetings are managed wholly by the boys. Quite often some of the instructors go in, attracted by an interest in what is going on, but they attend only as spectators. The trials are often very interesting, and there are sometimes so many witnesses to be examined that a case can not be completed in one evening.

Some of the boys develop ability as lawyers which would foreshadow legal talent, and these are always in demand for counsel. When the evidence is all in the lawyers make their pleas, the judge charges the jury, and the latter retires. The jury usually agrees on a verdict oftener, I think, than in real courts. Their verdicts are brought in sealed. Sentences are apt to be very practical, as the article of the chief of police which I have quoted intimates. I remember that once a boy, who was convicted of breaking a window in one of the cottages, was sentenced to mend all the broken glass in the entire city, while another, found annoying "Nannie," the goat, who is tethered on the campus, was condemned to feed and water her for a month.

The cottages vary greatly in size and appearance. The smallest are about 4 by 6 feet square. Others are considerably larger, and some of the more ambitious have a bay window or an L. They are furnished according to the taste and means of the owners. A favorite way of finishing the interior is to line the walls with cheap cretonne of a bright pattern, which is bought by the superintendent in a quantity which admits of it being sold to the boys at a price within their means. Pictures and ornaments adorn the walls, and nearly all the boys have a collection of books, which are moved into the cottages early in the spring and kept there until the coming of winter makes it advisable to bring them back to the main building. The municipality itself also has a library of 300 volumes, given it by various friends. These books are kept in the city hall. The librarian is appointed by the mayor. He has certain regular hours when he is at the hall to give out books and receive those returned, and the library, like that of the school itself, is very freely used. Furniture in the cottages depends very largely on circumstances. Every chair and table which is discarded from the main building is quickly snapped up. Some articles the boys can make for themselves, and their eyes are always open for others. I remember that once the frame of a couch came ashore on the beach with other driftwood. The boy who saw it first obtained permission to go and get it and covered it with excelsior and cretonne. Its possession in his cottage for a time made him the aristocrat of the town.

The first days of spring always see repairs begun all along the street, and requisitions for boards, paints, shingles, and materials of all kinds flood the superintendent's desk. Each cottage is surrounded by a plot of ground, and much taste is displayed in laying out these lawns with grass and flowers. The city hall has a lofty flagstaff and a good flag and several of the cottages have shorter staffs and smaller flags. One winter while I was there when property was low, two boys who were both good carpenters bought a small run-down cottage as a speculation. When it came spring, they repaired it thoroughly and painted it. Then they advertised it to be sold at auction, held the sale, though neither of them had ever been at an auction in his life, and cleared \$2.50 by the deal.

As I remember now, I should say that the value of the shares in the different cottages varies from about 60 cents each to \$1.10. Of course, a boy who has no money can not buy stock, but if he has money he can make any trade which seems

to him desirable. The shares bought, he draws his check for the amount, and the seller deposits this check to the credit of his account. In this practice in banking, in the management of real estate, and the learning to adjust prices to values and in the conduct of the city government, I think these young voters of Cottage row become better versed in the duties of citizenship than many adults ever do.

No account of the farm school would be complete which did not give a fuller description of the farm itself than I have yet done in this article, since that branch of the industrial work may be looked upon as the foundation of the system. In the 157 acres comprised in the area of the island there is practically no land that is not available for grazing and used for one or other of these purposes. It is the rule that the work of each boy for the first six months he is at the school shall be on the farm. In many cases the pupil remains longer on the farm, or is detailed to that work again. Visitors to the school almost always comment upon the rugged, healthy appearance of the pupils. There is no doubt that the good health which they enjoy and the sound constitutions which most of them seem to possess are in no small measure due to the healthy outdoor work. While there is no intention of making farmers of the boys, unless they develop a special fitness for it, many have been influenced by their early training at the school to follow farming as a means of earning a living. There is a large orchard of apple and pear trees upon the island and a garden of generous proportions furnishes an ample supply of fresh vegetables in their season and to store for winter. The farm produces all the potatoes and vegetables for the entire establishment. A herd of 25 good cows supplies all the milk needed. The yearly crop of hay is about 100 tons.

At least a bare mention must be made of three other important features of the school: The excellent library, now numbering over a thousand volumes, all standard books, many of them given by friends of the school and all very freely used by the boys; the great flower garden, in which each boy has his own individual garden to care for, and the military vacation camp for the boys, established in 1898 on Oak Knoll, one of the most beautiful parts of the island.

For nearly half a century the Farm School Band has been in existence and has been a helpful and pleasant feature of the school. This band was organized in 1857-58, such few instruments as were then available being used. The next year a set of second-hand instruments was hired. Later a set of first-class instruments was bought, and these have been replaced as occasion required and added to at times by gifts until the organization is now very well equipped. The band numbers from 25 to 30 pieces, and a supplementary organization of the same number of younger boys is maintained from which players are promoted to fill the vacancy in the band proper made by one of the older boys leaving the school. The boys practice in their playtime, except when they are sometimes drilled in the evening by one of their number, or when once a week, except in the winter months, a competent instructor from the city comes down to drill them. They take a great deal of pleasure in the work, and it is seldom during the daylight hours that the tooting of one or more horns in practice is not to be heard coming from the gymnasium. Some of the boys develop decided musical talent. Many continue to play in bands after they leave the school as a means of adding to their income, and several have followed music as a profession and achieved success. The band has frequently gone to Boston to give its assistance to various undertakings. It has played in Tremont Temple, and at the time of the Peace Jubilee, in 1872, was invited to join the orchestra there, playing beside noted bands from all over the world. The band has been occasionally asked to play at the Soldiers' Home at Chelsea for the veterans there, and for the last two years has played on Decoration Day for Thomas G. Stephenson Post 26, G. A. R., of Roxbury.

The question is sometimes asked, "How can Thompsons Island be reached from

the mainland?" There is no regular public means of communication. Once a month, from May to October, one of the boats of the Nantasket Line stops at the school wharf on its way down the harbor, and stops again later in the day on one of its return trips. This enables the relatives and friends of the boys to come and see them. These days are known as visiting days, and the date and hours are announced by cards, which are printed at the school and which the boys send to whomever they wish. For all other visits to island it is necessary to arrange with the superintendent. The school has its own steam launch, knockabout, and several rowboats, ranging in size from a stout ten-oared boat down to one which one boy can row. A capacious scow, towed by the steamer, is used for handling freight. Whenever it is necessary the steamer is used for crossing; but in pleasant weather one or more boys frequently cross in rowboats to carry passengers and light freight, or to do errands. The older boys are thoroughly trained in the handling of boats of all kinds.

In the terrible storm of November, 1898, the island and school suffered severely. Four large schooners which dragged their anchors at their moorings between Thompsons Island and Castle Island drifted in upon one another against the base of the school's wharf. The last of these to come in greatly damaged the break-water and wharf and, striking the school's steam launch, where she was moored, sunk her and completely demolished her. The landing floats were carried away, three valuable rowboats were crushed, and much other serious damage was done, especially to the dikes which protect the low land of the island from the salt water. By the generosity of friends of the school the steamer and rowboats have been replaced. It has been a pleasant fancy, suggested perhaps by a knowledge of the early pilgrims to this island, to give the boats names suggestive of that event. The steamer, the largest boat, is named the *Pilgrim*. The rowboats are respectively *Mary Chilton*, *Priscilla*, *Brewster*, *Standish*, and *Bradford*, while the freight barge bears the name of sturdy *John Alden*.

The value of an undertaking is measured by its results. Since the farm school has been in existence it has cared for 1,800 boys. Most of these have grown to make good and useful citizens. Some have achieved well-earned distinction. If the parent who raises up one good son is said to have done his country a service worthy of commendation, surely credit is due an organization which has sustained a parental relation to so many sons.

SCHOOL GOVERNMENT.

The question of discipline in school, notably during the time of adolescence, has always been a difficult one to solve. Says Prof. Edward J. Goodwin, of New York:

"German children are trained to submit to authority, but our boys must be taught to govern themselves. The former are to be subjects of a monarch, the latter are to participate in the government of a free state. This difference in the purposes of school government involves a corresponding dissimilarity in methods of discipline. In the one country the control of the school is direct, absolute, and sometimes severe; in the other the teacher constantly appeals to the reason of both pupils and parents, and exercises strict authority under the law only as a last resort. To bring a school under effective control by methods that command the assent of reasonable and liberty-loving pupils is just as difficult, and quite as essential, as to give skillful instruction in the several subjects of study. Our boys, as we believe, must have a definite degree of freedom of action, the larger the better so long as the proper work of the school is not interfered with."

This problem seems to have been solved in Chicago by the novel device of changing the school into a self-governing body. Prof. C.W.

French, of the Hyde Park High School, in Chicago, writes on this subject in the School Review of January, 1898, as follows:

While the problem of school government is one of the most important of the whole range of school life, it has received but little attention, comparatively, at the hands of educators. If our system of education has failed to reach its highest ideals in the past, our methods of school control have been at least as much to blame as our methods of instruction. Teachers have been so absorbed in their efforts to develop the intellectual life that they have too often neglected the cultivation of the motive powers. The brain has been taught to do its work well, but the will, the supreme endowment of mankind, has been left to work out its own salvation or destruction without direction or training.

Our free-school system was organized expressly to fit the youth of the land to discharge intelligently the duties of citizenship. It was believed by our forefathers, and with reason, that a free Government could not be maintained in its integrity without the free school, which was accordingly organized and fostered with the expectation that it would become the corner stone of the great structure of American civilization.

We live in the midst of democratic institutions under a representative government, yet our schools, which are intended to fit the youth of the land to participate intelligently in the various functions of such institutions and government, are essentially undemocratic and are controlled by a power which is nonrepresentative and in form, at least, autocratic.

The citizens of a political community have a voice, through their representatives, in the formation and execution of the laws by which they are governed, but the citizens of the school community—for the school is a distinct community by itself, with the interests and latent possibilities, if not with all the functions, of the larger community outside—are subjected to a control which is the very antithesis of a democratic government. And yet men wonder that the rising generation is so poorly fitted to take up and discharge the duties and responsibilities of citizenship. How is it possible to escape the conclusion that political incompetency is the direct and logical outcome of such a condition of affairs?

It is to be noted, further, that while methods of school government are perceptibly moderating in rigidity and severity and are becoming liberalized so as to give more freedom of action and a wider range for the development of individual tendencies, the system itself is as yet unchanged in principle and essence. It is still autocratic, although the slave-driver's whip has given place to the gilded scepter.

This state of things can not continue. Our civilization has reached the point where it demands not the reformation of the old system, but its abolition and the adoption of a radically different one. Already Great Birnam wood is coming to high Dunsinane hill and Macbeth's reign is ended.

The attention of the educational world is gradually, but surely, being attracted to this problem and many attempts are being made to solve it. It is the purpose of this article to describe very briefly an experiment which is being tried in one of our larger high schools along the lines of what has been called, perhaps unfortunately, "student control" and which has been accompanied by some results which are interesting and perhaps significant.

It should be said that the object of this movement is twofold: to teach the pupils to discriminate between right and wrong in their relations to their mates and to the school and to develop within them the will to do the right and shun the wrong; in other words, to substitute a wise and intelligent self-control for a system of external government.

In the main building of the school in which the experiment is being tried, more than 1,000 pupils, young men and women, ranging from 13 to 21 years of age, are

seated in sixteen rooms, including a large assembly hall. The remaining 400, who are seated in another building, have not as yet been included in the new system.

After a somewhat extended discussion of the whole subject with both teachers and students, which made all fairly familiar with the reasons for and motives of the new departure, and engaged their more or less active interest, the initial step was taken last May, two months before the close of the year.

After a short trial some changes were found desirable in the details of the plan which is now in operation, as follows: Each room elects in regular form a representative to a body, which is partly legislative and partly executive in its functions, called the senate. This body elects a president and secretary, appoints the necessary committees, and assumes control of the order in the halls, and of the care of the furniture and building. It formulates a code of laws and appoints a corps of tribunes, to carry them out. These laws are read to the students in each room, and carefully explained so that the reasons for their adoption and the methods of their enforcement are clearly understood, and then are posted in conspicuous places. Whenever classes are passing through the halls, the tribunes are stationed in all the strategic points throughout the building to see that the rules are observed.

The senate also appoints a court of three judges, to whom all cases of lawbreaking are reported, and before whom the more serious ones are tried, with the customary procedure of prosecution and defense. The judges, very wisely, make their administration reformatory rather than punitive in its purposes, and seldom find it necessary to inflict a penalty.

This, in brief, is the outline of the organization, which is of interest only because of the results which it produces. It will be noticed that this scheme of government is distinctly a representative one, and that each pupil can justly feel that he is an integral part of the system. Moreover, the whole body of the students, with very few exceptions, are intensely loyal to the idea. They take pride in the recognition of their rights, and they also feel that they are individually responsible for the welfare and the good name of the school. As a result of this the old spirit of a forced submission to authority is passing away, and in its place is coming a voluntary submission to the general rules of good behavior as embodied in the laws which they themselves have made and adopted; and it is especially interesting to observe that these laws are stricter than those under which they lived during the old régime.

When the experiment was begun, the senate was told explicitly, that for two months the designated functions of the school would be put unreservedly into their hands, and that neither principal nor teacher would interfere with their administration, either to hinder or to help. This announcement was made with some hesitation, but it was determined to give them an absolutely fair trial, and the result demonstrated the wisdom of the position.

The results already manifest are many and far-reaching. They penetrate every function of school life and influence all its relations. There is a better spirit displayed throughout the school, and it is the general verdict of the teachers that never before has the control of the class-rooms been so easy, and it is certain that the number of cases of discipline referred to the principal has materially decreased.

Two important results are evident even to the casual observer. The first is that excellent order is maintained in the halls without any interposition on the part of either principal or teachers. From 5 to 800 students are required to change their rooms at the end of each period and frequently to go from the first to the second floor and the reverse. At every turn and on each of the landings stands a serious and dignified boy or girl, and the slightest disorder is promptly but courteously checked. There is no unseemly haste, no conversation or laughter, but each student goes quietly and promptly to his appointed room, and the whole change is made in four minutes or less.

The second result is to be noted in the change of disposition. Under the old régime, the absence of a teacher from his post removed all visible restraint and frequently resulted in an outbreak of conversation and laughter, and by some it was even considered quite proper to evade the watchfulness of the teacher and to indulge in forbidden pleasures. The very fact that an arbitrary restraint is imposed upon a person by a superior authority, even though its reasonableness is recognized, will frequently arouse antagonism and inspire a spirit of rebellion. Under the new régime this attitude of mind is disappearing. There seems to be no difference in the general conduct, even if no tribune is in sight, and I believe that the present order would be maintained, at least for a time, even if the whole corps of tribunes should be withdrawn. They can hardly be dispensed with, however, because they stand as representatives of the student body and are symbols of its authority. Their presence gives a new dignity to school citizenship and is a constant inspiration to every one who passes by.

One question which was seriously discussed and which many feared would prove an obstacle to the success of a new system, related to the attitude of a student towards an offender. Under a system of self-government would he be willing to give information which should lead to the discovery of a law breaker, when that information should be given to the officers whom he himself had helped to constitute? It was finally decided not to define an issue on this point, nor even to require the students to commit themselves in advance, but to keep still and let the matter take care of itself. And it has been observed with interest that, up to the present time, no student has refused to give his testimony in any case where the integrity of his institution was at stake. In general, such evidence has been given in a manly and womanly way, and no stigma has attached to the witness. If this state of affairs becomes permanent, it will prove a strong argument in behalf of the system.

Of course, the adoption of this system does not constitute the desired revolution, but it must be expanded and adapted to meet all the contingencies of school life, and still further experiments are being continuously tried. The next step has been taken in connection with the senior class, who sit together in the assembly hall and number about 225. They have been selected both because they are the most serious and mature students in the school, and because an exceptional opportunity for the development of this system is offered by the fact that they sit together in one room.

It is impossible as yet to speak definitely of results. The chief features of the organization may be gathered from the following extracts from the constitution, which was drawn up by a committee appointed by the class:

PREAMBLE.

We, the students of the Hyde Park High School sitting in the assembly hall, in order that we may secure training in free government, develop our powers of self-control, and more fully know our relations as individuals to society, do adopt and ordain this constitution as a basis for the student government of the assembly hall.

ARTICLE I.—*Legislative.*

SEC. 1. All legislative powers herein granted shall be vested in a house of representatives under such restrictions as are herein made.

SEC. 2. The house of representatives shall be composed of representatives elected, one from each district, for a term of twelve school weeks, except as provided in section 3 of this article.

* * * * *

SEC. 7. The house of representatives shall convene at 2.15 o'clock on the first Monday after the election of its first members, and every second Monday thereafter, and may continue in session as business may require.

SEC. 8. Special sessions may be held at the call of the president of assembly hall.

* * * * *

SEC. 10. *Clause 1.* The house of representatives may provide that any bill, resolution, order, or other enactment which it may pass shall be submitted to a popular vote of the students for approval or rejection, and a majority of the votes cast concerning such measure shall determine the result.

Clause 2. If any measure so submitted shall be approved by the students it shall take effect as provided, but if any measure so submitted shall not be approved by the students it shall not have any force.

Clause 3. If within three school days after the passage of any bill, resolution, order, or other enactment 50 students shall petition that such measure be submitted to a popular vote it shall be so submitted.

Clause 4. The house of representatives shall provide for executing the provisions of this section.

SEC. 11. The house of representatives shall elect a clerk from the students of the assembly hall not members of itself, who shall serve for six school weeks and whose duty it shall be to keep a record of the proceedings of the house of representatives, to safely keep all records and documents belonging to the student government of the assembly hall, and to file all laws and other enactments in an orderly manner.

SEC. 12. The house of representatives shall have power to organize its own committees and make its own rules; to compel the attendance and good behavior of its members by such rules and penalties as it may choose to adopt; to expel, by a two-thirds vote of its members, any representative whom it may deem to have proven unworthy of the office; to define and provide a penalty for all offenses against the students of the assembly hall; to provide for the general order and interests of the assembly hall; to make such laws and provisions as shall be necessary for exercising the powers herein granted, and for applying all other powers and provisions vested by this constitution in the student government of the assembly hall or any department or officer thereof; to create and name such executive officers, subordinate to those herein provided for, as it may deem necessary; to organize them and provide for their regulation; to make laws for regulating the elections and determining the public will; to provide for the regulation of the board of chancellors, and for the procedure in all trials before it.

* * * * *

ARTICLE II.—Executive.

SEC. 1. The executive powers herein granted shall be vested in a president, a supervisor of wardens, and a prosecuting attorney.

SEC. 2. The president shall be elected by popular vote from the students of the assembly hall for a term of eighteen school weeks.

SEC. 3. *Clause 1.* The president shall preside over the sessions of the house of representatives.

Clause 2. He shall have the general supervision of the executive department and shall see that the laws are faithfully enforced.

Clause 3. He shall have power to nominate, and with the consent of the house of representatives, to appoint the members of the board of chancellors, the supervisor of wardens, the prosecuting attorney, and all other officers of the student government of the assembly hall whose appointments are not herein otherwise provided for, and who shall be established by law; but the house of representatives may vest the appointment of such inferior officers as it may think best, in the president alone, in the board of chancellors, or in the head of any department.

* * * * *

Clause 5. He shall have power to remove from office for incompetency or neglect of duty the supervisors of wardens, the prosecuting attorney, or any officer of his appointment, except the members of the board of chancellors whose removal is not otherwise provided for.

SEC. 4. *Clause 1.* The president or any member of the board of chancellors shall be subject to impeachment, by any twenty-five students sitting in the assembly hall, for neglect of duty or violation of the trust conferred in him.

* * * * *

SEC. 5. *Clause 1.* The supervisor of wardens shall be appointed by the president, and shall hold office during good behavior and the term of the president.

Clause 2. It shall be his duty, with the assistance of his subordinates, to enforce the laws; to apprehend offenders and bring them to trial before the board of chancellors; to assist in the collection of evidence and otherwise promote the prosecu-

tion of offenders as the prosecuting attorney may require; to execute such provisions as may be made for the general order and welfare of the assembly hall.

SEC. 6. *Clause 1.*—The prosecuting attorney shall be appointed by the president, and shall hold office during good behavior, and the term of the president.

Clause 2.—It shall be his duty to look after the interests of the students of the assembly hall in all cases before the board of chancellors, to see that all apprehended offenders are prosecuted, to execute any provisions, orders, or instructions which the house of representatives may intrust to him.

ARTICLE III.—*Judicial.*

SEC. 1. The judicial powers herein granted shall be vested in a board of chancellors, which shall consist of five members, appointed by the president.

SEC. 2. Each member of the board of chancellors shall hold office during his good behavior.

SEC. 3. Three members of the board of chancellors shall sit at each and every judicial session as a court to try and determine all cases within the jurisdiction of this government.

SEC. 4. The member first appointed to the board of chancellors by the president as herein provided, shall be the presiding chancellor, and shall sit at all sessions of the board.

SEC. 5. Two members of the board of chancellors shall sit at each session of the board as associate chancellors.

SEC. 6. The sittings of the associate chancellors at the sessions of the board of chancellors shall be so apportioned by law, that no associate chancellor shall sit at more than two consecutive sessions. * * *

After quoting some editorials of the students' own paper, the White and Blue, which reflect the sentiments of the school, he concludes by saying:

In conclusion it only remains to be said that this experiment was undertaken with much doubt and with some hesitation, but with the firm conviction that some system of the kind must be adopted in the near future. The results, however, have far exceeded our expectations, if not our hopes, and the belief that the new departure, when wisely organized and fully developed, would work an important revolution in school life, has become almost a certainty.

Similar to the Junior Republic is the School State at Ellicott City, Md. The subjoined constitution of that state will explain its objects and mode of management. The principal, Mr. J. M. Gambrill, offers the following word of explanation:

The system of pupil government known as the "School State" was introduced in the Ellicott City schools early in the school year 1900-1901. It was adopted with the sole idea of improving the tone of the schools, of training in the power of self-government, and of imparting a practical knowledge of civil government, though it seems to have attracted not a little notice from the public.

The idea of pupil government is thoroughly in harmony with the principles of the "new education." Spencer declares, in his great classics, that the object of discipline is to make a self-governing being, not a being to be governed by others. No very profound knowledge of ethics or human nature is required to perceive that permanent effects on the character must be wrought through impressions on the will of the subject and the exercise of his own self-activity.

The School State is the most complete and fully organized system of pupil government, so far as the author's knowledge extends. The origin of the movement is accredited to Principal John T. Ray, of Chicago. His plan consists in the appointment of class officers called tribunes, who perform a good many of the duties usually assumed by the teacher. There is also a "senate government," and a form known as the "school city," which latter approaches more nearly than any other to the School State. So far as the writer knows, no system of pupil government has heretofore been adopted in Maryland.

During the recent (School State) administration of Governor J. Clifton Harmon arrangements were made for the codification of the laws, the work being done by Charles Alfred Shreeve, formerly attorney-general. The principal was requested to make arrangements for the publication of the constitution and code, which are now issued with the twofold hope that they may aid and simplify the workings of the School State, and tend to perpetuate its existence.

J. M. GAMBRILL, *Principal*.

CONSTITUTION OF THE SCHOOL STATE, AT ELLICOTT CITY, MD. ADOPTED DECEMBER 17, 1900. AMENDED MARCH 6, 1901. AMENDED MAY 17, 1901.

ARTICLE I.

SEC. 1. The purpose of this constitution is to organize the Ellicott City public schools as a School State. When agreed to by the teachers and three-fourths of the pupils it shall be adopted by the departments so voting. The details of such voting, and of all elections, shall be under the direction of the principal.

SEC. 2. As far as practicable the constitution of Maryland shall be the standard in all cases not otherwise provided for in this instrument or by law; and, as far as practicable, the several departments of government shall be guided in the conduct of business by the laws and customs which obtain in the corresponding departments of the government of Maryland; and of the practicability the principal shall be the judge.

ARTICLE II.

SEC. 1. All officers shall serve for a term of two months and until their successors are elected and qualified; and terms of office shall begin on the second Monday, or the next school day thereafter, of alternate months.

SEC. 2. The qualifications of all officers shall be a standing of 90 per cent in deportment and 75 per cent in scholarship. If any officer shall fall below this record after his election, for two consecutive weeks, he shall be thereby disqualified and the vacancy filled according to law.

SEC. 3. Any officer who shall be twice convicted of breaking the laws of the School State shall be thereby disqualified for the remainder of the term for which he was elected or appointed, and the vacancy filled according to law; and if, in the opinion of the court, the crime is of a specially culpable nature, then the offending officer may be declared removed by the court for the first offense.

SEC. 4. Each officer shall qualify by taking an oath of office in the manner prescribed by law.

ARTICLE III.

SEC. 1. The chief executive officer of the School State shall be a governor, who shall always be elected from the high school department.

SEC. 2. In the absence of the governor his powers and duties shall devolve upon the president of the senate, the speaker of the assembly, and the attorney-general in the order named.

SEC. 3. The two upper departments only shall vote for governor.

ARTICLE IV.

SEC. 1. The governor shall appoint, by and with the advice and consent of the senate, a secretary of state. It shall be the duty of the secretary of state to attend all meetings of the general assembly and of the senate, to keep a record of the attendance of the members and of all proceedings, and to record the yea-and-nay votes of the members; to have the custody of the great seal of the School State, and to preserve the official copies of all laws.

SEC. 2. As soon as possible after its organization each general assembly shall elect a state treasurer.

SEC. 3. An attorney-general shall be elected by the high school department, and a state's attorney shall be elected from the high school and one from the grammar school department. If possible, they must be persons who have been admitted to the practice of law in the School State. They shall prosecute all cases for the state and may grant a nolle prosequi in any case with the consent of the court.

SEC. 4. A clerk of the courts and deputy shall be appointed by the governor, by and with the advice and consent of the senate. The clerk (or deputy) shall keep a record of the proceedings and testimony given in the circuit court, and shall also act as clerk of the court of appeals.

SEC. 5. A sheriff shall be elected by the pupils of the two upper departments, and the chief of police and the first two sergeants shall be deputy sheriffs in the order named. It shall be his duty to serve (personally or by deputy) all writs issued by the courts. The governor shall appoint a chief of police and four sergeants with necessary patrolmen. These officers must see that the laws of the School State are obeyed at all times, and report to their chief or to the sheriff all offenders. The sheriff shall instruct and supervise the police in their duties and see that the said duties are performed, and shall report all offenders against the laws of the state to the attorney-general and state's attorney. Neglect of duty on the part of the sheriff or police shall be punished as the assembly shall decide by law, and, in the absence of such legislation, in the discretion of the court.

SEC. 6. Lawyers, in order to practice in the School State, must pass a satisfactory examination given by the principal, and possess a certificate of the same. All such certificates shall be registered by the clerk of the court.

ARTICLE V.

SEC. 1. The legislative powers of the School State shall be vested in a general assembly. The several departments shall be entitled to representation as follows: High school department, 1 member from each class and 4 at large; grammar school department, 1 member from each class and 2 at large; intermediate department, 2 at large; primary department, 1 member at large; by all the departments, 1 teacher.

SEC. 2. At the first meeting of every assembly a speaker shall be elected. The assembly shall meet regularly every Friday (that is a school day) and may meet more frequently if necessary for the transaction of business.

SEC. 3. The members from the high school department shall constitute a senate. They shall elect one of their number president and shall have power to legislate on subjects pertaining exclusively to the high school department. The senate may be convened by its president at any time.

SEC. 4. When a bill shall have passed the general assembly in the manner prescribed by law, it shall be sealed with the great seal and transmitted to the governor for his approval by the secretary of state. If the governor approve the bill he shall sign it in the presence of the speaker of the assembly, the president of the senate, and the secretary of state, or any two of them; the bill shall then be a law. If the governor disapprove of the bill he shall return it to the general assembly within three days, with his objections, or at the next meeting of the general assembly, if there be no meeting within three days. The bill when returned shall again be voted upon, and if three-fifths of the members vote in its favor it shall become a law. If the governor retains a bill more than three days it shall become a law the same as if he signed it.

SEC. 6. The sheriff or deputies shall read every law immediately after its final passage and upon the order of the secretary of state, in each department, and no citizen shall be liable to any penalty for violating a law until after such reading.

ARTICLE VI.

SEC. 1. The judicial power shall be vested in a circuit court and a court of appeals. The members of the circuit court must, if possible, be persons who have been admitted to the practice of law in the School State.

SEC. 2. The circuit court shall be composed of three judges elected from the high school department, two from the grammar school department, and one teacher elected by both.

SEC. 3. The circuit court shall have jurisdiction over all cases arising under the laws of the School State, unless otherwise provided by law. It may call accused persons and witnesses before it, and in the absence of legislation may punish contempt in its discretion.

SEC. 4. The principal shall be, ex officio, a court of appeals. An appeal may be taken to this court in any case, but if the decision of the circuit court is sustained the accused is liable for extra penalty, in the discretion of the court.

SEC. 5. The judges of the circuit court shall elect at their first meeting one of their number to be chief judge. The chief judge shall then name one of the associate judges to preside in his absence.

ARTICLE VII.

SEC. 1. Bills of indictment shall be drawn by the attorney-general or a state's attorney. The attorney-general or a state's attorney shall then ask the court to summon the accused person and the witnesses before it and try the case.

ARTICLE VIII.

SEC. 1. The governor must not practice law by acting as counsel in any case while in office. Judges of the circuit court can not plead before that court in any case while in office.

SEC. 2. No person shall hold more than one office under the School State, but no person shall be exempt from police duty except the governor, attorneys for the state, and judges.

ARTICLE IX.

SEC. 1. Inasmuch as the principal of the schools is responsible to the school authorities for the conduct of the schools it is expressly understood that all acts, executive, legislative, and judicial, are subject to his approval.

ARTICLE X.

SEC. 1. The governor, secretary of state, treasurer, president of the senate, speaker of the assembly, and attorney-general shall constitute a board of public works. It shall be their duty to hold at least three meetings during their term of office, and to take proper steps for public improvement of every kind. The governor shall be chairman of the board, which shall meet on his call.

SEC. 2. There shall be a board of health composed of two members elected from the high school department and one from the grammar school department. They shall elect their chairman and hold at least three meetings during their term of office. They shall take proper steps for preserving the health and promoting the comfort of the citizens of the School State.

SEC. 3. The board of public works and the board of public health shall each make a written report to the general assembly and to the principal of their proceedings. A secretary to perform this work shall be named by the chairman at the first meeting of each board.

ARTICLE XI.

SEC. 1. Any officer may be removed by the governor for neglect of duty, provided that an appeal shall lie to the senate. When such a case is tried before the senate the governor shall present his reasons for removing the officer and prosecute the case. The governor may be impeached and removed by the senate. When the governor is on trial the chief judge of the circuit court shall preside, and the president of the senate shall not sit in judgment. The senators shall take the judge's oath before the trial begins, said oath to be administered by the chief judge of the circuit court.

CODE OF LAWS.

An act adopting and legalizing the code of public general laws of the School State, prepared by C. Alfred Shreeve, in pursuance with a resolution of the general assembly (April 25, 1901) entitled "A resolution to provide for a commissioner to codify the laws of the School State," and declaring the same to be the "Code of public general laws of the School State."

SEC. 1. *Be it enacted by the general assembly of the School State*, That the code of public general laws of the School State, as prepared by C. Alfred Shreeve and submitted to the general assembly in pursuance with a resolution of the general assembly, entitled "A resolution to provide for a commissioner to codify the laws of the School State," the several chapters, articles, and sections of the revised code of School State laws (March 11, 1901), which are hereby repealed and reenacted, with amendments as contained in the code of public general laws of the School State, be, and the same are hereby, approved, adopted, and declared the code of public general laws of the School State in lieu of and as a substitute for the laws in effect on the 14th day of May, A. D. 1901.

SEC. 2. *Be it further enacted*, That this act take effect from the 15th day of May, in the year of our Lord 1901.

Approved, May 14, 1901.

[SEAL.]

Approved, May 15, 1901.

J. CLIFTON HARMAN,
Governor.

FRANK BURTON,
Secretary of State.

J. MONT GAMBRILL,
Principal.

ARTICLE I.—*Judiciary.*

SEC. 1. The courts of the School State are courts of law and equity. The same procedure shall be followed by the court of appeals when exercising original jurisdiction as hereinafter prescribed to be followed by the circuit court in criminal cases.

SEC. 2. The circuit court shall convene at the call of the chief judge, or any three associate judges, and proceed with the trials of such cases as the attorney-general or a state's attorney may be ready to prosecute, and such cases shall be tried as soon as possible after the attorneys for the state shall have notified the court of their readiness to proceed. Three judges must be present to adjudicate a case.

SEC. 3. When the court shall have been called to order the prisoner (who shall have been previously brought by a bench warrant upon the indictment) shall be arraigned—while standing the indictment against him being read by the clerk and prisoner pleading guilty or not guilty—and the plea recorded by the clerk.

SEC. 4. If the prisoner pleads guilty he shall at once be sentenced in the manner prescribed by law: *Provided*, That the court may hear testimony in order to determine the exact nature of the offense.

SEC. 5. If the prisoner pleads "not guilty," the trial shall proceed.

SEC. 6. Counsel for the state and defense, in the order named, may make opening remarks upon the line and character of testimony to be presented.

SEC. 7. Witnesses shall be called at the direction of the chief judge, or presiding judge, for the state and for the defense and for the rebuttal by the state, in the order named. When each witness has given his testimony, the opposing side shall have the right to cross-question, but such questions must be confined to the matter already brought out in the witness's testimony or examination in chief, unless not objected to by the opponent. The side bringing the witness may recross-examine. The court may rule out a question which it deems irrelevant or improper.

SEC. 8. All testimony being in, the counsel on each side (not exceeding two, except that the state closes) may present the argument of his side, the state having the right to open and close.

SEC. 9. The court shall then determine the verdict within three school days, which shall be announced by the presiding judge, as follows:

"In the case of the School State *v.* _____, the verdict is _____ ('guilty' or 'not guilty')."

SEC. 10. If the verdict is "not guilty," the presiding judge shall dismiss the prisoner; but if the verdict is "guilty," the presiding judge shall pronounce the sentence of the court—the prisoner standing—as follows:

"A B, _____, you having been tried before this court on a charge of _____, and found guilty, are sentenced _____."

SEC. 11. A record of every sentence shall be made by the clerk, signed by the presiding judge, and transmitted to the teacher having charge of the prisoner; by said teacher the sentence shall be executed.

SEC. 12. Every witness, before testifying before any court or judicial body, shall, with uplifted right hand, distinctly answer the following question in the affirmative before being permitted to testify:

"Do you, in your testimony before this court, promise faithfully to speak the truth, the whole truth, and nothing but the truth?"

SEC. 13. Any person who shall testify before any court or judicial body, under the oath prescribed by law, and who shall be convicted of making false statements, shall be guilty of perjury. The penalty shall be in the discretion of the court.

SEC. 14. The clerk of the court shall issue subpoena in the form prescribed by law, directing witnesses to appear before the court when requested by the attorney-general, a state's attorney, the defendant, or the counsel for the defendant.

SEC. 15. Any citizen failing to obey a subpoena or any other writ shall be attached; the said writ to be in form as fixed by law.

SEC. 16. All sentences of court consisting of recesses are to be construed to mean two-thirds of the time now known or hereafter designated as recess. It shall be lawful for the court to allow an alternative of work or time equivalent to the recesses.

SEC. 17. The form of indictment shall be as follows:

School State.

The _____ of the School State does present that _____, late of the School State aforesaid, _____ (recite acts) _____, on the _____ day of _____, in the year of our Lord nineteen hundred _____, which said acts are contrary to the form of the act of the assembly _____ (here may be recited

more counts or declarations), ———, and against the peace, government, and dignity of the state.

_____,
Attorney ———.

On the back thereof the following:

School State *v.* ———; indictment; filed ———; witnesses, ———; and (nature of offense) ———.

SEC. 18. The form of the bench warrant shall be as follows:

In the ——— court for the School State.

To the sheriff of the School State, greeting:

We command you to take the bod— of ——— and ——— immediately have before our said court here to answer an indictment for ———.

Witness, the Hon. ———, chief judge of our said court, the ——— day of ———, A. D. 190—.

Issued ———, 190—.

_____, Clerk.

SEC. 19. The form of subpoena shall be as follows:

School State, sc:

To the sheriff of the School State, greeting:

You are hereby commanded to summon ——— to appear before the ——— court ——— of the School State, at ———, on the ——— day of ——— next, at ——— o'clock — m., to testify for ——— against ———.

Witness, the Hon. ———, chief judge of our said court, the ——— day of ———, A. D. 190—.

Issued ———, 190—.

_____,
Clerk of Courts for School State.

On the back thereof the following:

——— *v.* ———, summons: ———

_____,
Attorney for ———.

SEC. 20. The form of attachment shall be as follows:

School State, sc:

School State to the sheriff of the School State, greeting:

We command you that without further delay you attach ———, so that you have ——— before our ——— court ——— to answer touching a contempt which he has committed against said court, as is alleged, and further to abide such order as shall be made in ——— behalf ———.

Witness, the Hon. ———, chief judge of our said court, the ——— day of ———, A. D. 190—.

Issued ———, 190—.

_____,
Clerk of Courts for School State.

SEC. 21. Any citizen who speaks disrespectfully to the court while in session, libels the judge, tampers with witnesses, disobeys writs or orders, misbehaves while an officer of the court in official action, fails to obey subpoena, refuses to testify, rescues or attempts rescue from an officer of the court, fails to appear under a recognizance, shall be guilty of contempt of court. The penalty shall be not less than two recesses nor more than fifteen recesses, in the discretion of the court.

ARTICLE II.—Officers.

SEC. 1. Bribe: Any citizen who may offer to reward any officer for not executing any part of his duties or threatens or disturbs him in the performance of any duties which he may have executed, is executing, or ought to execute, is guilty of a misdemeanor, and on conviction thereof shall forfeit not less than two recesses nor more than ten recesses, in the discretion of the court.

SEC. 2. Commission, appointed officers: The form of commission to an appointed officer shall be as follows:

The School State to ———, greeting:

Be it known that, reposing great trust and confidence in your knowledge, integrity, and love of justice, you are hereby appointed ——— to do equal right and justice according to law in every case in which you shall act under this commission, freely without sale, fully without denial, and speedily without delay, and to hold the said office justly, honestly, and faithfully for ——— or until you shall be duly discharged.

Given under my hand and the great seal of the School State, at Ellicott City, Md., on the ——— day of ———, A. D. 190—.

[GREAT SEAL.]

By the governor: _____.

_____,
Secretary of State.

SEC. 3. Commission, elected officers: The form of commission to an elected officer shall be:

The School State to ———, greeting:

Be it known that the people of the School State, reposing especial trust and confidence in your prudence and honesty, did, on the ——— day of ———, 190—, elect you ———, to hold said office from the ——— day of ———, 190—, for ——— or until you shall be duly discharged therefrom, and to execute the duties of said office with diligence and fidelity, without favor, affection, or partiality, according to law.

Given under my hand and the great seal of the School State, at Ellicott City, Md., on the ——— day of ———, A. D. 190—.

[GREAT SEAL.]

By the governor: _____.

_____,
Secretary of State.

SEC. 4. Convening the assembly: The form shall be, for calling an extra or special session of the assembly, as follows:

The governor of the School State to the members of the general assembly, greeting:

Be it known that, by virtue of the power vested in me by the constitution of this state, you are hereby convened on the day of ——— next at ——— m.

Given under my hand and the great seal of the School State, in Ellicott City, Md., on the ——— day of ———, A. D. 190—.

[GREAT SEAL.]

By the governor: _____.

_____,
Secretary of State.

SEC. 5. Dereliction for neglect of duty by police: The sheriff and police must report all infringements that come to their knowledge of the laws of the School State; and if they neglect to report all or any infringements upon the laws they will be deprived of not less than six recesses nor more than twenty recesses, in the discretion of the court.

SEC. 6. Failure to perform police duty: Any citizen not legally exempt shall, upon request of the officer in charge, go upon police duty temporarily. Failure to comply with said request shall be punished by forfeiting four recesses, unless satisfactory excuse be submitted to the court.

SEC. 7. Nomination to senate: The form of executive nomination to the senate shall be in the following form:

The governor of the School State to the honorable senate of the School State, greeting:

Be it known that by virtue of the power vested in me by the constitution of this state, I hereby submit for your advice and consent the name of ——— for (name of office) ———.

Given under my hand and the great seal of the School State at Ellicott City, Md., on the _____ day of _____, A. D. 190—.

[GREAT SEAL.]

By the governor:

_____,
Secretary of State.

SEC. 8. Oath: Every person elected or appointed to any office under the constitution or laws of the School State shall, before entering upon the duties of the office, take the following oath: "I, (name) _____, do on my honor promise that I will support the constitution of the School State and will be faithful and bear true allegiance to the School State, and that I will to the best of my skill and judgment diligently and faithfully, without partiality or prejudice, execute the duties of the office of _____ according to the constitution and laws of the School State (if a judge), and that I will in all cases fairly and impartially, without affection or prejudice, administer justice to all.

Date _____.

SEC. 9. Pardon: The form of pardon shall be as follows:

The governor of the School State to _____, greeting:

Be it known, that by virtue of the power vested in me by the constitution of this state, you are hereby pardoned for _____, of which you were convicted by the _____ on the _____ day of _____, A. D. 190—.

Given under my hand and the great seal of the School State at Ellicott City, Md., on the _____ day of _____, A. D. 190—.

[GREAT SEAL.]

By the governor:

_____,
Secretary of State.

ARTICLE III—Order.

SEC. 1. Disorder: Disorder in the halls, on stairways, or in class rooms during teachers' absence before, during, or after school, during recess or noon hour is forbidden; and any pupil violating any part of this section shall be, on conviction upon a specifying indictment, deprived of not less than four recesses nor more than ten recesses in the discretion of the court.

SEC. 2. Interference: Any malicious interference with any persons, or serious interference without reasonable cause, is forbidden, either on the school grounds or on the way to and from school; and any citizen convicted of violating any part of this section shall be deprived of not less than two recesses nor more than twenty recesses in the discretion of the court.

SEC. 3. Litter, water, and mud: The throwing of litter, spitting, or carrying an avoidable quantity of mud or dirt, throwing or spilling of water in any of the halls or upon any of the stairways is forbidden; and any citizens violating any part of this section shall forfeit not less than two recesses nor more than six recesses in the discretion of the court.

SEC. 4. Article VIII, section 2, of the by-laws, rules, and regulations of the state board of education, which is: "The use of profane and unchaste language, the use of tobacco in any form, and the carrying of firearms or other dangerous weapons are strictly forbidden," and any pupil who violates any part of this section shall be tried by the court of appeals and punished according to the decision of said court.

SEC. 5. Stairs and hallways: All pupils are to pass up and down from grounds to class rooms only upon the order of the sheriff, chief of police, or officer in charge, and at all times in an orderly manner. There shall be no running, but one step shall be taken at a time; no loud talking or other unnecessary noise; no taking hold of, pushing, pulling, or any interference with others will be allowed. The penalty for violating any part of this section shall be not less than two recesses nor more than ten recesses in the discretion of the court.

SEC. 6. Striking: No pupil shall strike another in malice or anger. The penalty for violating this section shall be not less than four recesses nor more than fifteen recesses in the discretion of the court.

SEC. 7. Treason: Treason shall consist in malicious and false representation of the School State in any official character and in intriguing to prevent the accomplishment of justice; the penalty for violating any part of this section shall be the loss of suffrage and of the right to hold office forever under the School State; this disability can only be removed by a two-thirds vote of all the members of the general assembly.

SEC. 8. Trespass: Trespassing upon the adjoining properties is unlawful without the consent of the principal; any citizen violating this section shall forfeit not less than two recesses nor more than ten recesses in the discretion of the court.

SEC. 9. Trespass, library: The books, periodicals, and all other articles belonging, now or hereafter, to the library in the Ellicott City public schools, shall be taken from the library, distributed, marked, covered, otherwise used, and the library opened only by the librarian, his assistant or deputy, or with the permission or by the command of the principal or a teacher. Any pupil violating any part of this section shall be fined not less than 5 cents nor more than 10 cents, or in lieu thereof forfeit six recesses.

SEC. 10. Mutilating: Cutting, mutilating, destroying, or marking on any part of the buildings, fences, or trees, either on the school grounds, or on the way to and from school, is forbidden; and the penalty for so doing shall be not less than six recesses nor more than twenty in the discretion of the court; if in the opinion of the court the offense is of a specially culpable character the offender shall be sent to the principal for punishment.

SEC. 11. Loitering: Loitering on the way to and from school is forbidden; and any pupil on conviction thereof shall forfeit not less than one recess nor more than six recesses in the discretion of the court.

CHAPTER VI.

INTERNATIONAL ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, ARTS, AND EDUCATION.

By Prof. Patrick Geddes, F. R. S. E., Secretary of the British and American Groups.

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INTERNATIONAL ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, ARTS, AND EDUCATION.

International Assemblies: Paris, 1900; Glasgow, 1901. General Secretary, M. Liard; General President, M. Léon Bourgeois; Assistant General Secretaries, Paris, M. Émile Bourgeois; Glasgow, Prof. P. Geddes.

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INTRODUCTORY SUMMARY.

The progress of science is much like that of industry or of affairs. It moves in two apparently opposite directions, which really complete one another. At one period we especially notice the advances in the division of labor and the corresponding progress of detailed investigation. At another time our attention is called to some great reorganization of our industrial processes, some new concentration of capital, or great development of communications. Similarly in science we see separate workers uniting into larger and larger groups, permanent societies, or temporary congresses, as the case may be, while these again may unite into a larger whole, like the sections of the British or the American Association, for instance. The question has been increasingly asked for many years, Why should these processes stop here? Beyond these national societies must we not have completely international ones? Broadly speaking, there are two ways in which this movement might arise, from above and from below, and both have simultaneously and independently been coming to pass. One very natural and obvious method is that the leading scientific society of each country should cooperate with its peers in other countries. Hence a conference was held in the autumn of 1899 at Wiesbaden, and again at Paris in April, 1901, among the representatives of the Royal Society of London, the Academies of Sciences of Paris, Berlin, Vienna, the Smithsonian Institution of Washington, etc., and arrangements for cooperation in various lines of work have since been under consideration. Thus is being founded something corresponding to a high court of science; to an international senate. But besides this upper house of science there remains room for a lower house also, one more fully representative, more widely democratic, one ready to include all who seek to inquire and to know, to learn and to teach. This time we must include the numberless scientific societies of all kinds and all places wherever these may be doing living work, and with these the universities of the world also. We must similarly aim at meeting the needs of all the specialist congresses, and we must naturally also start from the great gatherings of the workers' democracy of science, such as the British Association and its French, American, and other sisters.

The formation of an international association, beginning with these, has again and again been proposed, notably in America. By the British Association meetings at Montreal and Toronto a few years ago interest was so far aroused that a sum of money is said to have been bequeathed in the United States to such an international association when founded. An active step was made in September, 1899, in consequence of the simultaneous meetings of the British Association at Dover and the French association at Boulogne. It was a moment of the general outburst of opinion against the Dreyfus verdict and of a somewhat wholesale denunciation of France in general and of the Paris Exposition in particular. It was even suggested by a great London newspaper that the British Association should boycott the French one, despite all their arrangements for their friendly meetings. This would have been a hard measure in any case, but to an association mainly composed of Dreyfusards and "Intellectuels," and whose last president had just been a martyr in the cause, it was absurd. The British president, Sir Michael Foster, spoke out manfully in his inaugural address and called upon the association not only for every courtesy during the meetings, but for loyal support of and cooperation with the Paris Exposition and its congresses, with their "first Witenagemote of the science of the world."

Encouraged by this generous and statesmanlike lead, a circular testing the opinion of the association was circulated through its committees, and 500 signatures of approval, many of them among the most eminent in British science, rewarded its initiators beyond their most sanguine anticipations. The welcome of the French Association at Dover and Canterbury, and the cordiality of the return visits to Boulogne will not readily be forgotten by those who shared them. That the first international meeting should be held at Paris in 1900 was on all hands recognized as a matter of course. Besides the French Association, no less than 120 specialist congresses were then to meet, and these in all subjects, from archaeology to electricity, physics to folklore, meteorology to medicine, bibliography to automobiles. Here then, was already being organized a general gathering of representatives of all studies and from all countries on a scale far vaster than any had ever before dared to dream. The great building erected at the exposition as its Palais des Congrès was thus the center from which the 120 congresses, with as many thousand members, were organized throughout the summer. The steps toward international cooperation then effected are too numerous for record. But a great additional impulse also came from the University of Paris, lately regenerated. Freed from the official tyranny of the Napoleonic University of France, she is now again the largest of the universities of the world. She is the head, too, of a new system of regional universities, all acquiring a fully German, even an American, completeness and equipment. Here, in fact, is a movement of which British educationalists, perhaps even some American ones, still know too little, since their foreign experience has been mainly derived from Germany; but it is time to recognize that French education, as much as the French army, is something very different from what it was before the war. The great founders of the German universities are no longer with us; those of France are still in full activity, like those of America, and it is no disrespect to the university presidents of America to say that here in Paris an even greater task has been successfully carried through. To cite only two or three names, M. Lavissee, the historian; M. Gréard, the rector, and especially M. Liard, the permanent under secretary of state for higher education, a great initiator, organizer, and administrator in one, should all be better known to all who seek to found or to improve higher educational institutions in other countries.

The University of Paris may now, in fact, be taken as not only reorganized upon the highest German level, but as the center of a clear and conscious endeavor to utilize her special advantages, not only historic, but actual, and again to lead, as she was wont to do, both in the educational and in the scientific movement of

the world. Nowhere in the world is the ancient cosmopolitanism of learning, the internationalism of culture, the unity of science more deeply felt or more nearly recovered. The suggestions of the proposed international association were thus warmly received by the university authorities of France. Following the meeting at University College, London, under the presidency of Sir Archibald Geikie, at which a British branch of the association was formed, a meeting was held in Paris, at the ministry of public instruction, at which the French group was constituted. It was decided by both groups to recruit for the congresses, and also, as far as might be, to utilize the vast object lesson of the exposition, viewed as no idle show, but as the museum of the present. Hence was resolved, as the main work of the educational section, an attempt to explain and interpret the many wonders of the exposition, and to renew both the open teaching and the free discussion of the ancient University of Paris in this vast temporary international university of the present.

A cordial invitation was sent, not only from the French group of the new association, but from the University of Paris, to the universities of the world. Prof. Emile Bourgeois was accredited to Berlin and Prof. Patrick Geddes to the universities of America. German, American, Russian, Belgian, and Swiss groups of the association were thus formed, all to meet in Paris. The story of the new association's work in Paris during the exposition and also afterwards is summarized below, while broadly similar undertakings are now being proposed during and after the exhibition of Glasgow, and with the more adequate time for preparation, and of course fuller experience also, much more may be done at the St. Louis Exhibition of 1903. Suffice it for the present to say that for the interpretation of the Glasgow Exposition, British, French, Russian, German, and American cooperation is already offered, so that whoever wishes scientific interpretation and skilled guidance in this subject or that language—say in electricity or in art, say in matters German or French, Russian or Canadian—may readily find it. The Paris Exposition, as museum of the present, has thus been better interpreted and understood, and that directly by thousands, indirectly by many more. A wide and fruitful action, not only upon education, but upon many branches of science and of art, has thus been going on throughout the last summer. From this temporary outburst of international activity new and more permanent activities are in turn arising, for an international exhibition does not simply take stock and close one period of progress; it may also open a new one. And if in Paris, why not now also in Glasgow? Why not next also in St. Louis?

In this way has, in fact, already arisen a second and not less important field of work for the association—that of endeavoring to utilize these great cooperative but transient bursts of activity which we call international expositions for the more permanent advantage of the cities and countries where they may be held, as furnishing permanent international centers also for some at least of the scientific or educational interests represented. Hence besides its assembly, with its scientific meetings and discussions, it has its interpretation of the expositions, and so on, its museums committee, of the work of which at Paris an account is given below.

I.

GENERAL PURPOSE OF THE ASSOCIATION.

The many agencies, the innumerable individuals, occupied in the sciences or the arts, in education, or in social improvement are increasingly felt to be working in harmony. All are seen to be cooperating in the development of a common civilization, and each advance, whatever its place of origin, speedily oversteps local

and national boundaries. Hence have arisen the international exhibitions and congresses so characteristic of our time. To supplement and to advance this international movement, to record its manifold results and to make them more and more widely accessible, to extend their educational usefulness and further their practical applications are the tasks of this association. Its arrangements toward carrying out these in detail, as by contact with societies and congresses concerned with all branches of knowledge, with the various arts and professions, and with education in the widest sense and on all its levels, are naturally still in comparative infancy, but may be best set forth as planned and partially developed in the course of the association's first international assembly, held at Paris during the exposition of 1900

ORIGIN OF THE ASSOCIATION.

The formation of an international association has been often suggested in recent years and even discussed in various forms, as notably between the American and British associations for the advancement of science and at the Montreal and Toronto meetings of the latter. The present organization dates from the (September, 1899) meetings of the British and French associations for the advancement of science at Dover and Boulogne. Here a very large and representative British committee was formed, including upward of 500 members of the British association alone, among whom may be mentioned Lord Lister, Sir John Burdon-Sanderson, Sir John Murray, Professors Haddon, Lodge, Thompson, Schafer, Howes, and Mavor, and with these many leading representatives of applied science and industry and of chambers of commerce. This general committee held its first meeting at London in October, 1899, and elected as its president M. Léon Bourgeois, so widely known as one of the most progressive of European ministers of education and as a leading representative of the recent peace congress at the Hague. As vice-presidents were elected the Right Hon. James Bryce and Sir Archibald Geikie, with Prof. Patrick Geddes as secretary. A corresponding meeting was held in Paris at the ministry of education, and a French committee was constituted, its president being M. Gréard, member of the French Academy and rector of the University of Paris. Steps toward the constitution of other national groups were reported. M. Léon Bourgeois was elected general president of the whole association, with M. Liard (permanent secretary of state for higher education) as its general secretary.

As the result of these meetings it was resolved to hold the first international assembly of the association at Paris during the exposition of 1900. The cordial approval of the authorities of the exposition having been assured, a substantial initial fund was provided alike within the British and the French committees. The association was incorporated in Britain and in France, and offices were opened at Paris, London, and Edinburgh, and in other European cities; while Professor Geddes spent upward of two months in the United States, bearing not only general introductions as secretary of the British group from Mr. Bryce and Sir Archibald Geikie, but a recommendation and mission to the American universities in particular, this being from M. Gréard in his double capacity as president of the French group of the association and as rector of the University of Paris. The formation of an American group was thus prepared for, leaving the question of organization to be decided later by conference in Paris. Preliminary meetings of the association were held in Chicago, New York, Boston, Philadelphia, etc.

The inaugural assembly of the association was spaciouly, if not magnificently, housed within the precincts of the exposition itself, the buildings of the University of Paris, of the Musée Social, etc.

It is unnecessary here to insist upon the magnitude, completeness, and magnificence of this exposition, with its collections illustrating alike the natural products,

the industries and the arts, the commerce, and the institutions of every country. Despite all criticisms, its arrangement was such as to make international comparison easy, and international cooperation, as well as rivalry, in all main departments of activity, perhaps, most obvious of all.

So vast a material display, alike of the resources of nature, of the applications of science, and of the masterpieces of art, and this in all countries, requires a no less complete immaterial counterpart, a correspondingly wide survey of the world of intellect and of ideals, and a no less full application of the highest aims of special and of general education. Hence, in fact, the two characteristic aspects of a modern exposition, its vast development of congresses, no less than of departments.¹

DEPARTMENT OF CONGRESSES.

The first task of the association and its assembly was thus to cooperate with the various international congresses to be held during the exposition, and, wherever necessary or desirable, to aid the existing agencies in recruiting suitable members for these. To the many specialists of all kinds who attended the exposition without being able to be present at the exact time of the particular congress most interesting to them, the congress information bureau of the association and the special rendezvous which it arranged proved of great service. Thus each member of the association, on reaching Paris, was enabled rapidly to reach its resources and to meet his fellow-workers, French and foreign alike. The international assembly was included in the official list of congresses as the permanent "*École internationale de l'exposition.*"

A wide publicity was given by the association to the literature of many of the congresses held during the exposition, and in several cases it recruited members for these. In return, the congresses similarly brought valuable members to the association and contributed much useful literature. This cooperation is one which admits of great development in future years, of course often, and perhaps more and more frequently, in connection with exhibitions, but not exclusively so.

RECORDS AND GRAPHIC SUMMARIES OF THE RESULTS OF CONGRESSES.

Besides keeping record of the congresses in the usual way, it was attempted, in some measure, to indicate their main problems and to summarize their main results by a full use of graphic methods, not only in relation to the contemporary

¹ Membership of the international assembly was obtained by payment of \$5 or £1, which entitled to one week's active participation in the assembly in Paris, and included five tickets of admission to the exhibition.

For continuance in active membership in Paris a further reduced fee of 12s. 6d. (\$3) weekly was charged.

A season ticket for the whole duration of the assembly was obtained by a single payment of £5 (\$25). This included five admission tickets to the exhibition for each week of attendance at the assembly.

Life membership, with full participation in all future assemblies, wherever held, can be obtained by a single payment of £10 (\$50).

The privileges of membership may be briefly summarized as follows:

1. Information and advice as to traveling arrangements and residence in Paris.
2. Use of information bureaux in London, Edinburgh, New York, and Paris. Letters might be sent to the office of the assembly in Paris and appointments made for meetings with friends there. Special assistance was available for those unfamiliar with French.
3. Expert guidance through the departments of the exhibition during any week of the assembly from May to October.
4. Admission to the lectures of the assembly during any one week, with five tickets of admission to the exhibition grounds.
5. Invitations to receptions, etc.
6. Participation in specially arranged excursions in and around Paris at the actual cost of fares.
7. Advantageous arrangements for attending theatrical, musical, and other entertainments.
8. A copy of the guidebook prepared for the assembly.

movement of the sciences and arts, but to their historic development. This was sometimes usefully correlated with the retrospective collections (*Musées Centenaires*), which proved so interesting a feature of the exposition. These records and summaries aim at uniting the clearest thought of many minds toward an increasingly synthetic presentment of the historic development, the actual state, and the immediate problems of the sciences, and these in their relation to the progressive forces of civilization.

REGIONAL SCIENTIFIC SOCIETIES AND THEIR PROPOSED COOPERATION IN REGIONAL SURVEYS.

As the great academies have recently begun to collaborate in bibliography and in specific tasks, so for a long time past the minor societies witness the annual meetings of delegates at the British Association, and similarly the *Congrès des Sociétés Savantes*, whose collective exhibition was to be seen in the *Champ de Mars*. The possibility of a thorough and useful collaboration lies in the coordination of their many studies in regional survey, in the union of their many lines of work and activity upon the map. The ordnance and the geological surveys illustrate this union most perfectly; but botanical, archæological, anthropological, and economic surveys are all already more or less in progress and only await coordination. This question, discussed at a preliminary meeting in Chicago in March, 1900, has already been laid before the delegates at the British Association in Bradford, in 1900, and will be again discussed.

UNIVERSITIES—THE CONGRESSES AS A PANACADEMIC MEETING.

The unprecedentedly vast and varied assemblages of special workers in all departments which the congresses thus brought together in Paris may also be viewed as an almost equally comprehensive representation of the universities of the world, and of its institutions of learning generally; in fact, as having been an informal, yet perhaps none the less important, panacademic meeting. In this vast gathering of the teachers of all countries, and in the many meeting places which were at their disposal, as well as in their special congresses, all subjects of educational interest were actively discussed, and this amid an increase of that feeling of the international unity of the higher learning, and of the essential amity of its exponents, in which the universities of the Middle Ages and of the Renaissance historically arose and to which those of our own day are returning.

FACILITIES FOR STUDENTS.

The assembly, recognizing that these academic attractions did not appeal to the professoriate only, sought to make the special facilities of the University of Paris, as not only much the vastest, but in various ways once more the completest of modern universities, better known by students as well as teachers, and, in addition to this, endeavored to make more widely known the facilities for the study of French language, literature, history, etc., offered by the summer schools of the *Alliance Française* and other bodies.

INTERACADEMIC RELATIONS.

That special recommendation of the Association and its work, by the head of the University of Paris, to the presidents and faculties of the American universities, which has been already referred to, may thus be understood in the fullest way as tending, in the first place, to bring together the teachers and graduates of American, French, and foreign universities; and, in the second, to promote, under judicious guidance, that widening of the experience of the student which was so characteristic of ancient universities, and which has been so marked an advantage

of German university life in our own times. In every way, therefore, it tended to promote better interacademic understanding and to strengthen the ties which already link universities throughout the world.

UNIVERSITY EXCHANGES.

The meeting of lecturers from many universities, as remote as Moscow and California, which took place last summer, naturally led to the discussion of university interchanges. Not only suggestions, but definite proposals toward the organization of these are being formulated, and will be brought before the Association at Glasgow.

LECTURES AND SKILLED GUIDANCE.

The majority of visitors to Paris last year came, of course, primarily for the purpose of seeing the exposition as a whole, rather than of attending any of its congresses; hence what was practically the largest department of the assembly's work was that of furnishing interpretation and skilled guidance to all the departments of the exposition, so that the visitor might see more thoroughly those things in which he was specially interested, as well as understand more of the exposition generally.

Throughout the main period of the exposition, and in due proportion to the necessarily varying numbers and requirements of its membership, an ample variety of daily lectures and visits was provided. These lectures were of different types, which may be broadly described as introductory, special, and general; or, more particularly, as dealing with the popular, the artistic, the industrial and commercial, the agricultural, the hygienic, the educational, the geographic, the economic, the social aspects and exhibits, interests and ideas of the exhibition and its congresses. Occasional lectures also were delivered, dealing with the historic influence and significance of each group of exhibits and congresses, with their social and educational possibilities, their general and philosophic interpretation. In each department the services of efficient and distinguished lecturers, as fully as possible representative of different countries, were arranged for. The lectures were delivered in English, as well as French, and with such proportion of other tongues as demand justified.

The lectures were broadly grouped under the main headings of art, industry and commerce, agriculture, hygiene and medicine, education, geography, economics, and social science. Each week some lectures were given in all these divisions; but from week to week, and, still more, from month to month, somewhat greater attention was given to one department. This naturally partly depended upon the succession of congresses, partly upon the varying demand of the majority of members. In May, the season of the opening of art exhibitions generally, art received the fullest attention. In June and July industrial and technical questions were appropriately brought forward. In the latter part of July, and especially in August and September, education and hygiene were especially prominent; in September and October, social economy and the general summing up of the results of the exposition.

POPULAR COURSES.

At the beginning of each week were delivered two or more lectures, giving an account of the exposition as a whole, and on the remaining days lectures illustrative of some of its most widely interesting series of exhibits.

ART COURSES.

Art courses by competent critics offered a sympathetic interpretation of this leading aspect of the exhibition, and this not only as regards architecture, sculp-

ture, painting, decoration, and furnishing, but also printing and bookbinding, costume, and the minor arts. Historic and actual technical methods were also outlined and illustrated.

TECHNICAL AND COMMERCIAL COURSES.

These were arranged for all the leading departments of the exposition. They were delivered by leading experts, and illustrated as fully as possible by graphics, lantern demonstrations, etc., and by reference to the actual exhibits.

While some of the lectures were addressed to skilled workmen and others conversant with technical details—mechanical, electrical, metallurgical, textile, and the like—others required no special previous knowledge, but sought to interpret the progress of each art and its underlying science to the intelligent public. The commercial importance of each main industry was also kept in view. These courses were planned with special endeavor to harmonize the statistical and economic with the technological point of view, and this with due recognition of the increasing claims of art.

AGRICULTURAL COURSES.

Here some lectures were addressed to professed agriculturists, as also to horticulturists and foresters, while others broadly interpreted this group of arts and its cognate sciences to a more general public. Increasingly important questions, such as those of irrigation, forestry, and tropical agriculture, were also considered.

COURSES IN HYGIENE AND MEDICINE.

Without attempting to trespass upon the work of medical schools, the assembly organized a series of lectures outlining the advance of medicine and hygiene and indicating the problems at present prominent, particularly in their larger aspects—e. g., the rise of bacteriology and its application to hygiene and to the incipient "municipalization of health." The visits to the magnificent hygiene department of the exposition, with its memorable Salle Pasteur, etc., were specially prominent; visits to the Pasteur Institute itself, also.

EDUCATIONAL COURSES.

These proved one of the most important and most widely helpful features of the assembly. To outline and estimate the recent history of education, and this in its relation to the general progress of the world; to focus and clarify its many discussions; to indicate and outline the best exhibits of the galleries, the best thought also of the congresses, could not but be of manifold service to all divisions and levels of the teaching profession, as well as to the general public.

GEOGRAPHIC COURSES.

As the special sciences may be viewed as rising out of the analysis of the old descriptive geography, so they begin to find again their concrete synthesis in modern geography; all the separate manifestations of energy, all the modes and products of evolution investigated by the separate sciences, being but the scenes and details of a general drama of world evolution, of which the description is geography in the highest sense.

This series was treated with special care and fullness, not only as regards the concrete illustrations of characteristic regions, and of regional survey generally—naturally in the first place with special reference to Paris and its environs, and to France as a whole, and thence to the countries illustrated throughout the exposition—but also as regards the higher aspects of geography as a scientific and educational discipline; of geotechnics also, considered as the highest aspect of industrial activity.

ECONOMIC COURSES.

The relation of these courses to all and each of the preceding ones, industrial or artistic, agricultural or geographic, is too obvious to need comment. It was the task of the concrete economist here to complete the view of each specialist in his own department, to sum up and to coordinate the whole. The geographer, the technologist, the art critic, with their appreciative comparison of all countries and their productions, make not only for increased knowledge, but for better international understanding, for mutual respect and admiration of qualities, for sympathetic recognition of defects also, and hence for greater wisdom of action as well. So it is for the economist to elucidate and set forth that profound solidarity of civilization which underlies all our national differences, and to insist that these differences find their highest expression in that individuality of production which is the greatest incentive to commerce, as this is the very foundation of peace.

SOCIAL COURSES.

Probably in no department did this exhibition more notably excel its predecessors than in the organization of its department of social economy, and this upon a scale of completeness which no future exhibition claiming serious attention can henceforth afford to omit. To bring together this multifarious and unparalleled wealth of materials, and documents, and statistics of all kinds, reports and photographs, plans and models, an exceptional amount of intelligent effort was lavished. To utilize these resources some corresponding effort was required; still more if it were desired to appreciate the best thought of the corresponding congresses, numerous and varied as these were. Here again the aim of these lecture courses was to reconcile breadth with clearness of view, and, so far as might be, not only to point out the highest goals of social effort, but practicable ways toward reaching them.

THE GENERAL COURSES.

These endeavored to interpret the exposition and its main features in a more general and philosophic way, and this in relation to the general progress of the closing century and to the urgent problems of the opening one.

In this way the congresses and the widely representative gathering of specialists of all kinds which they brought together were viewed as a vast resource of educational power, to be as far as possible utilized by the association for the benefit of the intelligent visitor. The assembly thus served as a useful intermediary between the congresses and the public. One of its main tasks was thus to summarize, interpret, and diffuse the results of science, legitimately popularizing these without vulgarizing them; on the one side interesting a widening public, and so recruiting for every science and for the congresses of future years; on the other, aiding the specialist himself to see and to present his subject both from the widest speculative aspect and the most practical side, here developing its applications, there justifying its place in culture. The scheme was not simply that of organizing the most ambitious of summer schools hitherto, but, as already indicated for the congresses, it had a synthetic purpose also. It sought to view and to set forth the exposition in its highest aspect—the museum of the present interpreted by the university of the present.

Against popular schemes of education, such as the summer school, the reproach of superficiality has been made, and perhaps not always without some justice, while purely academic studies are apt to incur either that of narrowing intensity or of vague generality. In presence of this concrete museum of the exposition and of the critical and constructive worth of the congresses, the reconciliation of

specialist accuracy and synthetic clearness was hoped for, and, if not completely, at least in some degree realized.

VISITS—LECTURES.

Daily visits to the different departments and galleries of the exposition were organized. These were nearly always complementary to a lecture, and were, of course, in conveniently small parties, each under an expert guide.

The following lecturers took part in the programmes of the English-speaking groups:

Miss Jane Addams, Hull House, Chicago; Rev. J. O. Bevan, College of Preceptors, London; Prof. A. S. Bickmore, Natural History Museum, New York; M. Jean de Bloch, Warsaw; Mr. B. Branford, Yorkshire College, Leeds; Mr. W. Law Bros, London; Mr. Calloway, Washington; Prof. Adolphe Cohn, Columbia University, New York; Dr. James A. Cree, Paris; Mr. Henry C. Devine, London; Mr. John Duncan, Chicago Institute; Mr. Robert Erskine Ely, Cambridge, Mass.; Prof. Patrick Geddes, St. Andrews University; Prof. N. P. Gilman, Meadville, Pa.; Mr. C. H. Grinling, Woolwich; Prof. Louis G. Janes, Cambridge, Mass.; M. La Fontaine, Brussels; Mr. H. T. Lukens, California, Pa.; Mr. T. R. Marr, Edinburgh; Prof. James Mavor, University of Toronto; Mr. F. W. Michie, Dundee; Dr. D. K. Morris, Mason College, Birmingham; Mr. J. T. Morris, People's Palace, London; Prof. J. Arthur Thomson, Aberdeen University; Dr. W. H. Tolman, New York; the Swami Vivekananda, India; Prof. Lester F. Ward, Washington; Mr. W. Franklin Willoughby, Labor Bureau, Washington; Mr. G. B. Zug, Paris.

To all of these, and to many other friends, the thanks of the assembly are due, but especially to Mr. Law Bros (since unfortunately deceased), Mr. and Mrs. Grinling, and Prof. Mavor, who each, during a prolonged stay in Paris, never failed to put themselves entirely at the disposition of members of the association. Nor should the devoted service of the office staff be overlooked in promoting the success of the meeting.

Besides the direct result of so many hundreds of lectures and demonstrations upon their immediate audiences, the indirect result of these, and of the wide publicity of the aims of the assembly, has been manifest not only in promoting special knowledge and general good feeling, but in the education of opinion, in diffusing through widening circles of press and public alike a fuller appreciation of the exposition and its best exhibits, its higher aspects, its many elements of progress. Hence in all the groups of the association there prevails a feeling of encouragement, and this still more for the future.

DEPARTMENT OF EXCURSIONS—PARIS, IN HISTORIC AND CONTEMPORARY SURVEY.

Paris itself has, of course, an almost unlimited wealth of attractions for the visitor, while the environs are scarcely less rich in historic and in picturesque interest. Hence the scheme of excursions not only comprehended the exposition and even the museums, galleries, and monuments of the city, but was so arranged as to give the visitor an idea of the historic development of Paris through the ages from her initial islet of the Seine to her actual present. Here the collaboration of historian and antiquary and the hospitality of the heads of great institutions was willingly and heartily given. Beyond the city also the visitor was similarly guided outward from the immediate environs and through the historic province toward an extended survey of France as a whole and of her place in general civilization.

For the student of natural science special excursions of geological and botanical interest were arranged. The relations of physical and social geography were kept in view throughout and illustrated as fully as possible, so combining the methods

and utilizing the results of naturalist and geographer, historian and sociologist. This department, in view of its great importance to teachers at the present time, received great attention, for it is not too much to say that in this respect education, alike in Europe and in America, is being revolutionized. The official studies of literature and of science, which have hitherto so largely divided schools between them, are being found to reunite and to acquire new interest and freshness when founded anew upon a broad and deep and first-hand experience—a real and personal knowledge of and interest in the aspects of nature and of human society which lie within the pupils' own immediate environment. For this regional survey of Paris and its surroundings, therefore, the collaboration of leading men of science and teachers, French, American, British, and others, was arranged.

Thursday afternoons were devoted to visits to the more important churches (Notre Dame, St. Germain-des-Près, St. Julien-le-Pauvre, St. Denis, St. Germain l'Auxerrois) and museums (Louvre, Cluny, Carnavalet, Luxembourg, Trocadéro, etc.) in Paris, and to places in the immediate neighborhood (Vincennes for Exposition Annexe, St. Cloud, Sèvres for national factory of porcelain, etc.). On Saturdays longer excursions were undertaken to enable members of the assembly to become acquainted with some of the chief historic monuments in northern France. These expeditions included Beauvais, Chantilly, Chartres, Fontainebleau, Montmorency, Provins, Reims, Rouen, St. Germain, Senlis, Sens, etc.

The special Guide to Paris, so ably prepared for the association by Mr. Stoddard Dewey, the Paris correspondent of the New York Evening Post, with its excellent maps by Messrs. Bartholomew & Son, of Edinburgh, was of great assistance to members in their visits to the exposition and in Paris.

Though the temporary purpose of this volume has passed away, it remains, save for a few pages of exposition details, of permanent value, and this not simply as a repertory of useful information to the visitor new to Paris, but as containing what is certainly one of the most trustworthy, compact, learned, yet withal readable and interesting surveys of historic and contemporary Paris which are to be found in the language. Copies may still be had by members of the association.

DRAMA, MUSICAL ENTERTAINMENTS, ETC.

The attractions and resources of Paris, as the most important center of dramatic art, were also kept in view, and the association obtained for its members some special facilities and advantages. Receptions and social gatherings were held at least once weekly, sometimes in the rooms of the association at the Palais des Congrès, and sometimes elsewhere, as notably in the pavilion of the United States. Members of the assembly were thus afforded opportunities of meeting those of kindred interests, and also of seeing something of the social life of France, and special introductions of both kinds were arranged for as far as possible.

REPORTS.

The example of the summer schools of science, art, and modern languages, now becoming familiar in the great university towns of Europe and America, and the lectures, demonstrations, and excursions in which the British and French Associations set so excellent an example have thus been freely imitated; but the more serious items of the association's programme were not forgotten. In presence of the Paris meeting of the French Association and of 120 specialist congresses, to proceed by the reading of special papers would have been to enter into competition instead of cooperation. Similarly, in presence of the general catalogues and of the specialist literature of the exhibition any mere overlapping of publications would be wasteful; yet the prolonged and detailed study of many parts of the exhibition by the lecturers and staff of the association naturally suggested the preparation of a number of brief reports. These, while necessarily leaving all attempt at com-

pleteness, whether of detail or of special survey, to the various official publications, French and foreign, briefly insist upon some of the features in which the present exposition excels its predecessors, and seek to diffuse some of its most valuable methods and results. Such reports are not so much needed in special arts or applied sciences, which have already an abundant literature, as in the more general fields—such, for instance, as the departments of education and social science, of public art, of the history of arts and sciences. Several of these will be submitted at Glasgow.

LITERATURE, ETC.

Returning to work accomplished, the special literature of the exhibition has been carefully collected and classified. A small collection of appliances to illustrate historic and geographic methods of teaching the elements of the sciences is in progress and should be proceeded with. The contemporary bibliographical movement, though more advanced in America than Europe, still needs active support and workers everywhere. Here the circulation of special bibliographies and card catalogues would be of wide use, and this to special workers in many fields. Some cooperation with the International Institute of Bibliography would in this connection be very desirable.

EXCHANGES.

Some important and valuable exhibits have been offered to the association for circulation or exchange. An initial experiment in this direction had already been in progress. A duplicate of the admirable nature-study exhibit of the Philadelphia Normal College, supplied by the kindness of Professor Wilson and her pupils, has been circulating among Scottish and English schools for some months, and will shortly start from Geneva on a similar journey among Swiss institutions. The principle is evidently one widely applicable, and a great number of interesting and valuable educational exhibits might be obtained, and these from various countries. Here may be specially mentioned a generous offer of cooperation from Prof. Bickmore, director of public instruction of the Natural History Museum of New York, which it is earnestly desired the association may be enabled to accept.

Nor need this be for schools and popular institutions only. The remarkable university exhibits of France and of America would have proved of the greatest service if they could have been circulated among the universities of other countries; for no university can make a stronger appeal to its own city or constituency than by clearly exhibiting the special excellences of others.

Similarly in civic matters. The remarkable tenement-house exhibition recently organized in New York and exhibited in Chicago, Boston, etc., is now available for exhibition in Britain, where the question of the housing of the people is also urgent. Again, such an exhibition as that organized by the Congrès de l'Art Public, under the auspices of the city of Paris, to illustrate the historic aspects and develop the artistic treatment of cities, would have a widened usefulness if it could be circulated from city to city in Europe and America, gathering illustration from each as it went. This suggestion has already been made by one of the trans-Atlantic delegates to the bureau of the congress. The Exposition de la Ville de Paris is also a type of municipal museum which can not be too widely imitated elsewhere.

SPECIAL COMMITTEES, *e. g.*, MUSEUMS.

Without trespassing upon the work of juries or of congresses, several standing committees were formed. Of these a single instance may here suffice—that of a committee on museums. While museums and collections of natural science or of historic art are broadly similar in principle and arrangement throughout all countries, the newer types of museum—geographic and anthropological, historic and antiquarian, educational and social—are still without any coordination or unity

of plan. Many cities exhibit beginnings of these; still more entertain projects. All are in some respects valuable and suggestive, yet all are unrelated and therefore so far incomplete. In March last, in Chicago, a meeting was held of specialists of all kinds interested in such museums—geographers and anthropologists, educationalists and sociologists—each interested in some aspect of his city or region, its natural or historic record or interpretation, its education or improvement. Every project submitted had some constructive interest, yet was vulnerable to criticism, and the meeting thus naturally expressed the need of a standing committee to discuss and report upon the whole question. Similar discussions and presumably similar committees are arising in other centers, as also in connection with future exhibitions; but it was evident that at the forthcoming Paris Exposition the subject could be most fully and adequately dealt with and all the various projects and discussions be most easily compared, and, in so far as might be, harmoniously combined. Hence this museums committee of the association and its possible usefulness.

This example may also serve as a convenient illustration of the essential nature and working of the association, which seeks to utilize and cooperate with the many elements of advance which are still too isolated from each other. It seeks to bring these together, to compare and to coordinate their best elements, and this in ways not only applicable within the greatest of world expositions, but adaptable in their best results to all minor scales of requirement, those, for instance, of museums and reference libraries, and these whether of city, township, or village, of university or school.

The further development of this museums committee in Paris in connection with the Rue des Nations, etc., is mentioned below (pages 280-287).

FINANCE.

Though a balance sheet naturally can not be presented before the general meeting at Glasgow, it is obvious that the expenses, both initial and permanent, of widely international communication, of offices and printing in Great Britain, in the United States, and in Paris, as also of the assembly during the exhibition, are very considerable; while the publication and distribution of reports and the arrangements for the work of this year have also to be provided for. Although initial outlays need not be repeated, neither the permanent organization nor the new developments above indicated can be carried on without considerable expense. The subscription of membership of the association and the proceeds of its assemblies may ultimately suffice for these, but it has been recognized, and this independently, by all the national groups that a substantial sum should be independently raised by each in its own country, the finances of each group being of course kept distinct, and their contributions to the common expenses equitably adjusted. Thanks to the munificent initiative of Sir Robert Pullar, who must be recognized as the founder of the British group, indeed, as yet, also of the American one, and of corresponding donors to the French group, the association has hitherto been worked upon a basis of international cooperation; i. e., the groups first on foot undertaking the main outlays without delaying for the financial organization of others. It has been, of course, amicably recognized that such temporary outlays of one group of the association toward the initiation and early development of others, as of the British for the American group, are to be considered as advances to be reimbursed as soon as possible.

It is estimated, in the light of the experience gained during the first year's work, that to carry out the plans indicated, including the assemblies at Glasgow and St. Louis, a sum of not less than £10,000 (\$50,000) will be needed, and hence an appeal is being made to all interested to become members, and to subscribe as liberally as possible.

FUTURE ASSEMBLIES.

The experience of the Paris assembly has warranted fully the continuance of similar organizations at future exhibitions, for example, those of Glasgow in 1901 and St. Louis in 1903. At these, however, it will be well to reduce the period during which lectures, etc., are given, and so give more attention to the specific tasks enumerated above. At Glasgow the association is already offered suitable accommodation, and it is hoped that a similar arrangement will be possible at St. Louis.

In its relation to exhibitions the work thus begun may be compared to that of the farmer, who begins his work at the great fair with the getting in of seed and implements, and ends it there with the year's crop, yet, none the less, continues it year long in the field.

II.

1. MEETING OF ENGLISH-SPEAKING GROUPS UNDER THE PRESIDENCY OF THE RIGHT HON. JAMES BRYCE, M. P.

A meeting of the English-speaking groups was held in the Petit Palais, Champs Elysées, on September 14, 1900. The Right Hon. James Bryce, M. P., vice-president of the British group, presided. Professor Geddes, secretary of the British and American groups, submitted a report (largely incorporated above) upon the work carried on by the assembly during the summer, and spoke of the necessities and prospects for the future.

The Rev. A. Sternberg then moved "That this meeting, having heard the secretaries' report, cordially indorses the work of the association in its various branches and recommends the publication of the specific reports in progress. It further approves the proposals to hold an assembly at Glasgow in 1901 and at St. Louis in 1903, and desires the executive committee to take the necessary steps."

Mr. J. Martin White, of New York and Dundee, in seconding the resolution, remarked that such an assembly might become of great use in aiding the design and the arrangement, and making clear the classification of future world's fairs.

The motion was unanimously adopted.

Prof. A. S. Bickmore, of the New York Museum of Natural History, moved "That this meeting recommends the association to the support of those interested in its aims and, recognizing the necessarily considerable expenses of organization and maintenance and the need of ample funds for carrying out the various objects indicated in the report, warmly supports the appeal of the general committee on both sides of the Atlantic toward increasing the number of ordinary and life members and of subscribers."

He was glad to know that suitable accommodation for the assembly had been secured in Glasgow, and he could assure the members of the association of a cordial welcome when they come to America in 1903.

Mr. C. H. Grinling, of Woolwich, in seconding the resolution, said it had to be recognized that scientific and educational work could not, in the nature of things, be self-supporting. It was very necessary to face the financial question, to make the association and its work better known, to increase its membership, and to add to the number of subscribers.

The chairman expressed his entire agreement with the speakers, and the motion was carried unanimously.

President Scovel, of Wooster University, Ohio, moved "That our profoundest recognition and thanks are due to the Right Hon. Mr. Bryce, our presiding officer, for giving the influence of his name, character, and position to this work, which

in its broad, international, and deeply intellectual character so well befits his active and generous efforts, and will certainly be rewarded by great success."

Professor Bickmore seconded the resolution.

The Right Hon. James Bryce warmly reciprocated on behalf of the British members what Professor Bickmore had said for the Americans, and assured the latter of the welcome they would receive at the Glasgow exhibition.

He hoped that all those present would endeavor to bring the aims of the organization to the knowledge of those who would be able to give it financial help. Science and learning, indeed, always went hand in hand with poverty, so that those who were engaged in educational work were seldom able to give anything beyond their services. But they all knew many who had never known the blessings and advantages of poverty and who were anxious to spend some of their superfluity in works of benevolence and public utility. Many present on that occasion, both from Great Britain and still more from the United States, had friends who might be interested in the work, and he hoped that whenever they had an opportunity of advising them as to the way in which usefully to spend money they would not forget the modest claim this international association put before them.

He was not able to tell them more of the actual work of the assembly, with its lectures, etc., than they knew already far better than he did. They knew what good work had been done and what better work could still be done. But he wished to say one word of something else which had been suggested to him by his visit to Paris and the assembly. It was a remarkable instance of what could be done by international cooperation, by the cooperation of those who spoke different tongues, inhabited different countries, lived in different fashion, but felt themselves all united by having the same problems to deal with, and felt that they could cooperate in solving them. This was of course best expressed by the union of British and Americans into one section of the assembly. The unity that had lately been growing up between the English and American people had in fact been expressed when one section was formed of the English-speaking people—of United States and Great Britain, with her colonies.

But he would go one step farther and speak of another and wider unity which this might suggest to their minds. There had been meetings of their chambers of commerce, and a great deal had been said of the advantages that were to be derived from peace and harmony between the nations. It was pointed out, too, that industry and commerce lived by peace. We had all to hope that the nations would come to learn that war was their greatest enemy, peace their greatest friend. At the same time they knew that commerce, much as they desired it to be a means of peace, sometimes led to strife. He thought that there was something which made far more strongly for peace than commerce, and that was the science and learning which did not depend for their growth and success on competition and rivalry. Feeling this, he urged that an association like theirs should be a great factor toward international understanding.

It was significant, too, he thought, that the first assembly of the association should be held in Paris, where was the great university of the Middle Ages. For within a mile of where they stood there had been lit in the twelfth century a beacon fire which had done more to advance the higher civilization of Europe than any other, and which had drawn there that great international assembly of those eager to learn and to teach which they now sought to imitate.

The Right Rev. Archbishop Ireland, of St. Paul, supported the views and the appeal of the chairman, and desired to say how much he wished well to the work of the association. It had begun well, had done a useful and important work in education, in science, and in the promotion of international sympathies, and he believed it would do still more in the future.

Prof. Émile Bourgeois, secrétaire-général adjoint, briefly expressed the satisfaction felt by the French members of the association in the active cooperation of the British and American, the German and Russian groups.

Professor Lexis, vice-president of the German group, and Professor Kovalevsky, of the Russian group, warmly concurred.

2. MEETING OF SECRETARIES UNDER THE PRESIDENCY OF M. LIARD.

A meeting of the secretaries of the national and international groups was held at the offices of the association, Palais des Congrès, on October 10, 1900, M. Liard, directeur de l'enseignement supérieur, international secretary, in the chair.

A report by Prof. Émile Bourgeois, assistant general secretary, on the work of the various national groups during the Exposition, was read and approved. The concluding summary may be cited:

Je crois pouvoir rendre aux présidents et secrétaires, aux professeurs des différents groupes un témoignage aussi complet et bien frappant de leur activité, en me bornant à constater que l'Ecole a fourni en quatre mois à peine près de 300 conférences de doctrines ou d'explications générales, sur les acts, d'abord, les sciences appliquées, l'industrie, l'économie sociale, la paix—qu'elle a, en outre, organisé 450 visites au moins dans toutes les sections, pavillons, et palais de l'Exposition. Si grande qu'ait été l'activité de l'Ecole, l'Exposition cependant ne l'a point épuisée: elle a été pour ses différents groupes l'occasion de conférences ou de visites dans les grands établissements ou monuments de Paris et des environs.

A raison de 800 leçons pour 120 jours, c'est une moyenne de 6 leçons par jour qui ont groupé ordinairement de 40 à 50 auditeurs, et souvent jusqu'à 300. Une certaine de professeurs ont enseigné dans les 4 salles: un personnel de huit secrétaires et de dix employés ont travaillé. Il y a plus d'une université qui dans un semestre ne donne pas une telle carrière. Et je ne crois pas que jamais l'Exposition ait provoqué un pareil mouvement d'études et d'enseignement pour six nations et en quatre langues: ce qui n'était pas la moindre nouveauté. Voilà, messieurs, votre œuvre en quelques mots.

The continuance of the existing national groups was intimated by the respective secretaries, and it was agreed to cooperate in an international assembly at the Glasgow exhibition in 1901, and at that of St. Louis in 1903. For this purpose the vice-presidents and secretaries of the British group were requested to act as the international bureau, and to make all necessary arrangements for 1901.

The objects and permanent constitution of the international association were then discussed. The draft constitution, prepared before the assembly by the British and French groups, was remitted to each national group, in order that a report on this and on the future activities of the association should be presented at a general meeting in Glasgow in 1901.

3. CLOSING RECEPTION UNDER THE KINDNESS OF M. LÉON BOURGEOIS.

A closing reception was held in the American Pavilion, Rue des Nations, Thursday, October 18, 1900, M. Léon Bourgeois, general president, in the chair.

There were present the ambassador of the United States (General Porter), the vice-presidents and secretaries of the French, Russian, and German groups, and a large attendance of members.

A letter of apology from M. Gréard, president of the French group, rector of the Sorbonne, was read.

The secretary briefly recapitulated preceding reports:

(1) As regards lectures, visits, excursions, upward of eight hundred had been given by the various national groups; (2) that the various groups had unanimously decided to hold an assembly at Glasgow in 1901, and St. Louis in 1903; and (3) in regard to finance it was estimated that a sum of £10,000 (\$50,000) was needed to carry on the work till 1903.

Several large subscriptions had already been paid in since the meeting of 14th September, including two of \$1,000 and one of \$500.

M. Léon Bourgeois said that scarcely a year had elapsed since they had met on the initiative of the British group to consider whether it was possible to form an international association, and to hold an international assembly at the Paris Exposition of 1900. Now they had their answer in what the secretary of the British-American group had just said. For months past the school had been at work, offering on the one hand daily lectures and guidance, and on the other aiding special groups of students, teachers, workingmen's delegations. This closing reunion did not by any means mean the death of the association; a programme of useful work was in progress and would continue; and though naturally this assembly closed with this exhibition it was only to reopen with fuller experience at Glasgow.

For his own part and that of his French colleagues he could not express their satisfaction in this work of true internationalism, nor overestimate the advantages of these groups, speaking four different languages, yet discussing the same ideas and studying the same facts.

The assembly had carried on at the exposition a great work of peace in studying not the theories, but the facts of industrial and artistic, of social and economic progress, and he believed that with future assemblies this work would become more and more important. He warmly congratulated the British and American groups upon their large contribution to the assembly, and, as general president of the association, he desired to recommend them very warmly to the consideration of the coming great exhibitions and of their countrymen generally. He hoped that he might himself be able to come to Glasgow next year; and, in any case, there would be to aid in the work of the English-speaking groups many representatives of France, of Germany, and of Russia, and he trusted of other European nations. In conclusion, he asked all to join with him in wishing success to the Glasgow International Assembly.

Herr Lüders, imperial privy councillor, vice-president of German group, echoed the words of their president. Although coming late in the field, the German group felt satisfied with its beginnings and was determined to do everything possible to aid next year's work.

Prof. E. de Roberty, vice-president of Russian group, while generally agreeing with what had been said, wished a practical advance in the internationalism of the association. Though the national groups were convenient for administration, he wished to see their action more unified, and divided only according to their interest in different departments.

Mr. Howard J. Rogers, director of education and social economy for the United States, moved the thanks of the meeting to M. Léon Bourgeois for his active interest in the association, and to the office bearers of the other national groups for their cordial cooperation with the English-speaking ones.

III.

INTERNATIONAL MUSEUMS AND INSTITUTES, PARIS.

(COMITÉ D'ORGANISATION DES INSTITUTS ET MUSÉES INTERNATIONAUX.)

I. Following upon the closing meetings and receptions of the British and American groups in October, 1900, a final banquet was organized at the close of the exhibition by the committee of the French group, in which upward of two hundred took part, chiefly members of the French committee and lecturers of the *École Internationale*, but with a full representation of the other national and lin-

guistic groups. M. Léon Bourgeois occupied the chair, and the speakers were MM. Herbet, Liard, Émile Bourgeois, and Choublier for the French group; Prof. Maxime Kovalevsky for the Russian, Mr. Berg for the German, Professor Woodward, United States assistant commissioner, for the American; Mr. Fabre for the (incipient) Canadian group, Professor Geddes for the British, the last-named having submitted the proposals of an informal international subcommittee. M. Léon Bourgeois in his concluding speech, after congratulating the committee upon the first assembly of the association, of which the viability and usefulness had now been so clearly proved, expressed his cordial approval of this new proposal to organize a committee for the preservation, if possible, of a number of the palaces of the Rue des Nations, and their utilization as a series of international museums or institutes, which would not only retain the most striking and impressive example of the international cooperation of the exposition, but perpetuate and develop its best results, and advance the permanent objects of the international association.

II. This committee of initiative, at first known as "Comité pour la Conservation et l'Utilisation de la Rue des Nations," numbered the following among its members: M. Léon Bourgeois; M. Liard, directeur de l'enseignement supérieur; M. Herbet, conseiller d'état; Professor Lavis; M. Duclaux, director of the Pasteur Institute; Prince Roland Bonaparte; M. Charles Normand, president of the Society for the Preservation of the Monuments of Paris; Prof. Émile Bourgeois, École Normale Supérieure; M. Georges Cain, conservator of the Musée Carnavalet; M. Schrader, the well-known geographer; M. Labusquière, municipal councillor; General Sébert; Dr. A. G. Martin, officer of hygiene for Paris; M. G. Moch, secretary of the Peace Society; Professor Wilson, Philadelphia Museums. Its meetings were first held under the chairmanship of M. Duclaux, and afterwards of M. Louis Herbet; M. Youriévitsh, attaché to the Russian embassy and secretary of the International Psychological Institute, and Professor Geddes acting as the secretaries, and afterwards also MM. Friedel and Hamelin.

The question of the actual state and durability of the buildings was referred to M. Louis Bonnier, who, as architecte-en-chef des installations de l'exposition, had superintended on behalf of the exposition authorities the erection of the buildings of the Rue des Nations. After inspection, he furnished a report recommending the retention of twelve of the buildings on the river front, forecasting approximately the outlays which would be desirable for the repair and upkeep of these for ten years, with introduction of the necessary heating apparatus, etc. This amount, after adding a very ample margin for unforeseen contingencies, and allowing for the purchase of rights held by contractors in a number of cases over the materials of the buildings, and of those of the contractors of the projecting platform of the river promenade, seemed fully within the range of practical possibilities, since it is not often that a dozen museum buildings could thus be obtained and put in order for ten years for a sum not exceeding that which had actually been spent less than a year before upon the construction of one of them.

A report upon the possible utilization of each building was next prepared, which may here be briefly abridged, since its principle may be of service in the not too distant future—that of adapting each building, with its well-marked national architecture and associations, to a future use in some department of scientific, artistic, or educational activity appropriate to the racial character, the historic record, or the contemporary achievement of its builders and donors.

The possible uses suggested by the exposition are many. Of these, the following were considered by the committee to be worthy of first consideration:

In the first place, there should naturally be a retrospective museum of universal expositions since 1799. In this museum would be gathered the archives and the illustrative documents of past expositions; and it would thus necessarily give a veritable summary of the history of industry, science, and art during a century of

progress. The museum would illustrate, besides the great series of Paris expositions, those which have been held in other cities from the Crystal Palace exposition of London (1851) till the Chicago (1893) and Glasgow (1901) expositions.

One of the special, and at the same time most useful and attractive of the exhibits, was surely the historic exposition of the immortal works of Pasteur at the Palace of Hygiene. The Pasteur Institute proposes to conserve this collection, and to enrich it by completing the historic part and adding all that can contribute to the illustration of allied works, as, for example, antiseptic surgery, the creation of Lord Lister.

After hygiene one passes, by a natural transition, through the idea of physical education to consider the questions of education in general, which held so prominent a place in the exposition of 1900. Here one finds three principal divisions:

(1) Physical education.

(2) Manual education, which is allied to physical education, and constitutes, with technical education, a distinct ensemble, easy to illustrate by representation of its processes and results.

(3) *School education.*—The exposition contained many collections of considerable importance, which have since, in great part, been dispersed. Most of these collections could be reconstituted, and some even improved. An important comparative museum of the school systems of different countries could thus be formed.

The Palace of Social Economy in the exposition contained a collection of the greatest practical utility, which specialists and the public alike must wish to see conserved and enriched. It comprised documents, pictures, graphics, and statistics of the greatest interest and value for the practical study of such important questions as workmen's protection, provident societies, charity, pensions, cooperation, agricultural syndicates, etc., and of all that affects the relations between capital and labor.

But besides the social sciences, the physical and natural sciences also held an important place in the exposition, and that by the numerous international congresses, as well as in their respective sections. It would be well, surely, to set apart a pavilion for the use of learned societies, often so inconveniently accommodated, and equally for the bureaus of the various scientific and international associations which owe their origin to the great congresses of the exposition. An amphitheater could easily be organized in one of the great pavilions where the reunions of societies and congresses might be held. The Rue des Nations might thus be made the convenient and recognized center for numerous congresses still to come.

The exposition was at least the third where the city of Paris had created a magnificent collection, unique in the world, of all documents and objects relating to civic life and calculated to impress upon the citizen a sense of his duties. All the activities of a great city were represented. It certainly was one of the most useful and most appreciated of all the exhibits; yet it, like the others, has been dispersed. Under the auspices of the city of Paris was organized also a congress on public art, accompanied by an exhibition of public art, too large to be accommodated in the Hôtel de Ville, but suitably lodged in the halls of the Palais des Examens. Around a collection admirably illustrating the transformations and the improvements made in the city of Paris were grouped collections loaned by other cities, French and foreign alike.

The new century has great need of such a museum as this; and if one of the pavilions of the Rue des Nations could be devoted to such a collection, there would be few things more interesting to the public or more useful to the world.

And how better could one finish this series of new museums, of which the exposition gave the inspiration and the example, than by a museum of peace? There was no separate department of peace in the exposition, but the subject was

outlined in more than one exhibit, notably in that of M. Jean de Bloch. The idea, however, is latent everywhere. Clear ideas and honest endeavors are not wanting, and a permanent museum must soon result. Where could a better site be found in Paris or in the world than in the Rue des Nations?

Turning now to the appropriation of the respective buildings, to the installation of the museums and of the learned societies, a practical question had to be decided, viz, to which of the various subjects suggested was each building best suited? It had also to be borne in mind that since each monument was typical of a nation and ought to recall the international sympathy which characterized the universal exposition, the result obtained would be perfect only if, in the allocation of the buildings for their new functions, equal account was taken of the genius and character of the nations which gave the buildings in question. Such an allocation would commemorate in some measure the contribution of each country to the common work of progress and of civilization.

For practical as well as for more sentimental reasons one could not do better than accommodate in the Palace of Germany many of the learned societies. The collections which Germany exhibited there during the summer of 1900 were chosen expressly, according to the catalogue, as an acknowledgment of the artistic impulse which she had received from France, and French science might fitly acknowledge in its turn the impulse which it has received from Germany. The questions of the organization of libraries and of international bibliography, of congresses and of learned societies, might all find a convenient center here, and here, too, might be housed the collections of the Palace of Social Economy.

For the collections of a civic order, for all that relates to municipal activity and to public art, no better accommodation could be found than that offered by the magnificent Belgian Hôtel de Ville, which represents so worthily the high civic traditions of the Flemish communes of the Middle Ages.

From purely practical points of view—the good light from the north and west, the windows greater in breadth than in height, etc.—the pavilion of Great Britain is preeminently adapted for bacteriological collections, the Pasteur museum, and the experimental sciences. The learned societies which have need of laboratories would find better accommodation here than elsewhere; for example, experimental psychology, which requires so much light for microscopes and other apparatus.

The pavilion of Norway might serve as the great lecture and meeting hall for societies and congresses, as the Thingvalla of each society or group of societies. The considerable space afforded by the walls and the gallery might be devoted fitly to the questions of navigation and of fishery, to Arctic exploration; in short, to all those sciences and arts in which Norway has so valiantly won her supremacy.

Finland provided one of the culminating exhibits of geography in the exposition. She offered in her pavilion, by its architectural form and the collection of objects exhibited, a marvelous idea of a regional life in all its aspects—place, work, family, institutions, intellectual culture, art. It would provide an admirable center for geography.

For geography the pavilion of Monaco might also be indicated; but it might more appropriately be devoted to oceanography and to the biological sciences; that is, to a continuance of the function which it served during the exposition.

Where better could we lodge all that relates to history than in the marvelous palace of Hungary, which represents so many places of national evolution, yet one, at the same time, common to Europe; which gather together all styles from the castle and the Gothic cloister to the Renaissance and its modern transformations, and succeeds in reuniting them, notwithstanding all their differences, in a most imposing synthesis. If one wished to build a palace for historical studies, a museum of the history of civilization, one could not build anything more symbolical or more beautiful.

Since the legendary foundation of the city of Upsala till our own days Sweden

has always been at the head of the industries which group themselves around iron. That is perhaps the reason why she has established a recognized superiority in physical education and a remarkable initiative in manual teaching.

The situation of the museum of comparative education would have to be discussed among all the nations. If we submitted the decision to Plato it would be given perhaps to the country which has done most for music—to Austria. If we decided from the point of view of the exposition, it would surely be given to the youngest of all the great nations—to the United States, which has given to the world the most striking example of progressive ideas, of progress at first material, of extraction and exploitation, of production, of transports and commerce; but followed by a new striving not less energetic toward the ideal, the beautiful in art, the true in science and in education, the good in all departments of social amelioration. Surely, then, we could not do better than offer to the United States the honor of accommodating the museum of comparative education.

But we have still to come to the smallest country of Europe and to its most ancient civilization in order to recover the artistic ideal with Phidias, encyclopedic science with Aristotle, the ideal republic with Plato. We could bring together in the beautiful pavilion of Greece the classical ideal and modern aspirations. It would be a new center of legitimate influence for classical archæology and for its contact with modern life. The analogy so striking, the comparison so legitimate and so encouraging between Delphi, with its sacred way, and the exposition, with its Rue des Nations, would thus find a worthy realization.

The retrospective museum of international expositions would be conveniently housed in the beautiful and well-lit pavilion of Austria, without impeding the employment of its central hall for musical recitals.

In the absence of a pavilion of Holland, the country chosen recently by a European congress to render homage to its historic priority in the domain of international law, where should we house the museum of peace? Perhaps in the pavilion of Bosnia; for it is there that have best been united and reconciled the most heterogeneous populations in Europe—the great historic antagonists, the Christian and the Mussulman.

Had more buildings been capable of being retained, the same principle might have been developed, and suggestions were not lacking. Thus, for Spain, geography, and for Russia, geotechnics; for Servia, forestry, and for Denmark, agriculture; for Holland, international law, and for Switzerland, comparative legislation; for Italy, history of the fine arts; for the Ottoman Empire, ethnography; for Persia, oriental languages, and so on; to each country, in fact, some department, in which its historic or its contemporary eminence or its special advantages are generally recognized.

It is not too much to say that the proposals of the committee met with immediate, wide, and even general approval, and especially so far as the preceding principles were concerned. Reference had to be made by some of the national commissioners to their respective governments; in other cases their contractors only had to be arranged with. The German Government at once generously responded, offering its building as a gift; the Finnish commission next followed, and speedily others, and by December even the last contractor was ready to come to terms. From the very outset, also, offers of important collections and of money had begun to come in.

The plan of asking not only for buildings and for money to put them in order, but at the same time for collections to fill them, was soon generously and promptly justified by the response of the public. Although the delays above referred to actually prevented the committee from issuing a subscription list, a leading Paris banker at once offered, in response to an article in the *Figaro*, a handsome sum to head this.

The prime result of scientific cooperation was at once assured. Active steps were taken on behalf of a number of scientific societies toward procuring quarters within the German and other pavilions, and this on the understanding that they accepted their due share of the necessary expenses of adaptation and upkeep. Best of all, actual collections, almost completely as suggested in the initial project, were liberally offered. Thus, the great Pasteur collection, at once the natural and the ideal center of an international museum of hygiene, was offered by the director of the Pasteur Institute, his active collaboration as well, and that of other eminent hygienists.

Through the intermediation of M. Charles Gimond, the eminent historian of Paris, one of the greatest private collections of the history of Paris was offered for the noble civic palace of Belgium. This offer included upward of 25,000 pictures, engravings, maps, and other illustrative objects and documents, besides books, to which the generous donor proposed to add a sum of 50,000 francs (\$10,000) toward the expense of hanging and arranging these.

Another connoisseur offered the committee a collection of sacred art, with 250,000 francs toward the general scheme, should a building be allotted to this purpose.

M. Jean de Bloch—so well known as the author of *La Guerre*, the work which is said to have been so influential in promoting the Hague conference, and which has since been so widely discussed in all countries—personally undertook to be responsible for the peace museum, and to reduplicate, if not actually to transfer thither, the peace museum he has so long been elaborating, and of which a small part was already exhibited in the exposition of 1900.

Toward the retrospective museum of expositions the eminent architect to whom the committee was already so much indebted, M. Louis Bonnier, offered his entire collection of 20,000 illustrative documents, as also his good offices in securing material for other collections.

For the proposed museum of geography (Arctic exploration, etc.), a committee, under the honorary presidency of Dr. Nansen and the acting vice-presidency of M. Schrader, was formed, and similarly the responsibility of initiating the museum of comparative history was undertaken by Professor Lavisse.

For oceanography and fishing the Prince of Monaco promised material aid in the form of duplicates from his well-known museum now in progress at Monaco. A union of resources was also arranged with the special committee for the organization of a fishery museum, M. Edmond Perrier, the director of the museum of natural history, undertaking warmly to cooperate.

Other important possibilities were coming in sight, and had it been possible to inaugurate the scheme earlier in the history of the exposition there is little doubt that it would have been immediately and widely successful.

Difficulties in the way of permanent retention were, however, in existence and were clearly recognized from the first. Besides each of the various national administrations and the administrative body concerned with the winding up of the exposition as a whole, the complex rights over the site had to be reckoned with. Upon the river front those of the ministry of public works, upon the thoroughfare those of the city, and midway those of the tunnel of the Western Railway made up a complex of administrations whose interests and views are not easily reconciled. The long vacation of the Paris municipal council next intervened and involved new delays. The foreign commissioners were necessarily anxious to wind up their affairs and close their bureaus, and thus the time limit prevented the acceptance of the buildings and the consequent execution of the project of housing international museums and institutes within them. This apparent failure of the scheme was, however, neither a surprise nor a discouragement to its promoters, who, knowing well by experience the immense practical and administrative difficulties to be met, had from the first been prepared for this. The buildings of the

Rue des Nations had at any rate not only served as a vivid and world-wide means of popularizing their conception of what the exposition might and should leave behind it and of what future exhibitions might be, but had brought them in an unexpectedly vast amount of material, of scientific cooperation, and even of financial possibilities. After due inquiry some offers were naturally found to be fixed to the Rue des Nations and to fall with it, but the committee were greatly encouraged to find that others (and these the majority) still held good on the simple condition of finding adequate lodgment elsewhere.

A meeting of representatives of all the groups of the International Association was therefore convened on January 4, 1901, by the international secretary, M. Liard, at the ministry of public instruction, the president, M. Léon Bourgeois, taking the chair.

M. Herbette fully indicated the history of the negotiations of the initiative committee, as above outlined, and the proceedings were approved, and the resignation of the committee was accepted.

M. Herbette pointed out that in view not only of the general approval in principle which the project had received, but of the very cordial and substantial support, not only in the matter of the buildings, but in the offer of collections, of specialist assistance, and even of large sums of money, the constitution of a permanent committee of the International Association to carry on the essentials of the scheme was practicable and advisable.

M. Léon Bourgeois then reviewed the work and possibilities of the association, reminding the meeting that when the constitution of the association was drafted last year, necessarily upon a very comprehensive basis, it was agreed on all hands and by each national group that the experience of a year or more would be necessary before formally adopting this, and even before the main lines of its immediate practical policy and international usefulness could be clearly marked out. Now, however, it had already two such lines laid down. The work of the association during the past summer, its recruitments for the congresses, its promotion of inter-university relations, and most of all its interpretation of so many departments of science, art, and education in four languages and for seven nations had made the *École Internationale de l'Exposition* not only a distinguished and a memorable success in itself, but an institution which, he felt convinced, would find an increasing place in every coming international exposition. So now with this more recent undertaking. The vast collections of the exposition were no doubt very largely dispersed, as its buildings were doomed; yet not merely a new principle of great possibilities in the future had been affirmed by this endeavor to retain the Rue des Nations as a group of international museums and institutes, but the practicability had been demonstrated of creating a number of these. He therefore moved that the members of the initiative committee be constituted into a permanent committee of the International Association, with powers to add to their number. This motion was unanimously adopted.

III. This international institutes and museums committee of the association met next day at the Hall of the Mairie of the Fifteenth Arrondissement by the invitation of the mayor, M. Beurdeley, president of the educational press congress, M. Herbette in the chair. It resolved itself for immediate work into two subcommittees concerned with (a) the collections and funds which had been offered to the initiative committee, and (b) the actual organization of the proposed institutes and the problem of finding suitable accommodation for them. Both committees have since met and a memorial¹ has been laid before the municipal council of Paris to ask accommodation for these initial collections in the extensive ground

¹ This "Memoire et Notes Concernant l'Organisation à Paris de Musées Ayant un Caractère International" is from the eloquent pen of M. Herbette, president of the association's committee above referred to. Copies may be had on application to the secretary.

floor of the Petit Palais des Beaux Arts. This building, by common consent the most beautiful as well as the most permanent of the exposition, is, even so far as accessibility, still more as unity and economy and convenience of working are concerned, preferable to those of the Rue des Nations. It lacks, however, that note of varied international cooperation in which the Rue des Nations was so attractive, but the idea was submitted to the municipal council of retaining at least one or two of the durable and easily removable wooden buildings of the Scandinavian countries, and of removing them to the Champ de Mars, as a means of preserving a germ of this portion of the project, which may also develop in future years in Paris, or be applied elsewhere.

Whether or not these precise locations be granted remains to be settled by the municipal council during the present year, but there is little fear that accommodation will soon be found elsewhere, if necessary, for these museums and institutes, separately if not together.

IV. The applicability of the same idea to other cities also is manifest. Thus American members of the committee have already urged its serious consideration from the very inception of the St. Louis Exposition of 1903, so that a number, at least, of the more important special and national buildings should be given sufficient permanence from the first, and that the collections, retrospective and contemporary, of the exposition should be so planned from the outset as to afford, as far as possible, both a nucleus and a residuum of permanent value. Were this done from the first the city, university, and scientific societies and institutions of St. Louis might possess after the exposition of 1903 a set of museums and institutes in many respects unsurpassed in the world. To erect and speedily to destroy buildings which have cost millions, to make collections of the greatest value and interest, and to disperse them, even when their owners are willing they should be retained, is neither economic nor educational. Such vast and costly experiments have no doubt had their uses, but Paris, at least, has made enough of them. It is time for more permanent undertakings. Every eleven years for the past half century Paris has been the world center of one of these vast and splendid, but transient, outbursts in practically all departments of modern activity and inquiry, and though it would be rash to predict what the opening of the second decade of the century may have in store, it would be still more rash to expect that so vast an accumulation of activity and such inquiry will not seek and find outlet and expression, and that both adequate and ample. To insure successful and permanent results preparation must begin years before the actual event. The beginnings made by this committee, whatever the measure of their immediate success may turn out to be, have thus been no mere Utopian endeavor, but a step in the direction of the scientific and artistic, educational and social development of the exposition and museum movements.

IV.

ARRANGEMENTS FOR THE GLASGOW INTERNATIONAL ASSEMBLY, 1901.

A meeting was held on Wednesday afternoon, March 6, 1901, in the Glasgow School of Art, for the purpose of considering the feasibility of organizing an international assembly for the advancement of science, arts, and education, similar to that which was organized in connection with the Paris Exhibition of last year. Lord Provost Chisholm presided, and was accompanied on the platform by Professor Geddes, one of the secretaries of the Paris assembly; Professor Barr, Professor Gray, Mr. J. E. Christie, Mr. Newbery, Mr. James Fleming, Bailie Steele, Mr. Mollison, Miss Paterson, Miss Galloway, and others.

Letters of regret for absence were read from Principal Story, Dr. Robert Caird,

and other prominent citizens, Letters were also read from eminent members of the foreign groups of the association; among others from M. Léon Bourgeois, general president of the association, from the French ministry of education, and from M. Gréard, rector of the University of Paris, indicating, in very full detail, the proposals of the university authorities, who constitute the educational nucleus of the French group of the association, to cooperate in every way by the selection of effective lecturers, prepared at once to express the best results of contemporary science and art, and also to deal more especially with the French exhibits, and containing the promise to encourage the influx of French visitors and organized delegations of picked workmen. Letters recommending the work of the association were also read from M. Herbet, vice-president of the exposition of 1900, from Mr. Thomas Barclay, president of the British chamber of commerce in Paris, and others; as also from eminent representatives of the German and Russian groups. The lord provost, in asking Professor Geddes to explain the constitution of the Paris assembly, and lay before the meeting proposals with regard to that of Glasgow, said he was sure the scheme had in it the elements of success, and that, if it were taken up and wisely and enthusiastically prosecuted, it would assist greatly in lifting up the exhibition beyond the plane of mere amusement and enjoyment, and in making it intensely interesting and highly educative.

Professor Geddes explained in detail the constitution of the Paris assembly, with its varied cooperation of members of the universities of France and many other countries, the technical congresses, the associations of all kinds which met at the exposition, and in particular the scheme of lectures and skilled guidance whereby members were enabled to visit the different sections of the exposition, and to understand the nature or significance of the exhibits in all departments under the leadership of experts. This scheme obviated the great difficulty any one person met with on visiting such a large exposition—the fatigue and confusion caused by the wealth of impressions and the number of things worth investigating. The system would be even more adaptable to Glasgow than it was to Paris, as the exhibition here was not so vast as that of Paris. Such an interpretation of the exhibition—as a museum of the present—tended to raise the scientific temperature of the community by the means of what was practically the university of the present.

After speaking of the aims of the international museums and institutes committee of the association, the speaker asked, Why should not something practical be done at Glasgow for hygiene; why should not the Scottish history collection result in the formation of a Scottish national museum; and why should not this museum have a Scottish history lectureship? Where, again, would we find a better center for a museum of electrical inventions than Glasgow? Over the gateway of the exhibition he would write "Here may ye see infinite riches in a little room," but over the exit "The eye sees only what it brings with it the means of seeing." The membership of the proposed assembly would attend the exhibition very largely, for such an attempt to raise the quality of our visits to the exhibition would naturally increase their number also. He would urge its formation, if only on the simple ground that one of the best ways of helping the exhibition to get as much as it could out of the citizens was to help the citizens to get all they could out of the exhibition.

Professor Barr proposed that the meeting approve the statement and work of the International Association for the Advancement of Science, Arts, and Education, welcome the proposed assembly in Glasgow, and recommend it to all interested in its objects. The bringing together of an international exhibition was always of the greatest value to a community; and they all looked forward to the Glasgow Exhibition to be a very great success, not only financially and temporarily, but by leaving behind it some permanent results. The proposed assembly would, he was sure, prove of great value in these directions.

Professor Gray seconded; and the lord provost, in putting the motion to the

meeting, said the impressions an exhibition made on an ordinary visitor were vague and confused, and anything that resolved these vague impressions into definite information and knowledge would be welcomed by every intelligent visitor. The scheme just outlined would do this, as by its means the many exhibits would be explained by experts, and thus a true mental and intellectual benefit would be derived from the exhibition.

The proposal was agreed to, and afterwards, on the motion of Mr. Henry A. Mavor, seconded by Mr. Alexander, it was decided to form a general committee of representatives of all the scientific and technical societies, etc.; and at the suggestion of the lord provost the above speakers were appointed to organize the general committee.

The committee appointed as a result of the above meeting have since made arrangements to hold an international assembly at Glasgow, from 29th July to 23th September. As at Paris, the chief work of the assembly will be to provide skilled guidance and to seek to interpret by means of lectures, demonstrations, visits, and excursions the international exhibition which will be open in Glasgow from May to October. The arrangements will largely resemble those of a university summer meeting, the subject of study being contemporary progress as illustrated in the collections of the exhibition and the city.

The internationalism of the assembly is assured by the fact that the various groups of the association are cooperating.

LECTURES AND GUIDANCE.

By the kind permission of the university court the lectures will be given in the University of Glasgow. As the exhibition stands practically within the same park as the university, the convenience is obvious.

The lectures, which will be given daily, will be delivered in English, French, and German, and daily visits to the departments of the exhibition will be arranged, usually in connection with the lectures. A due proportion of lectures and guidance will be devoted to geographical questions (including colonization, etc.), to the industrial and commercial exhibits, to the technical and constructive departments, to natural and applied science, to the progress of invention and discovery generally, and also, if possible, to agriculture, horticulture, and forestry, while a large share of attention will naturally be given to the collections of fine arts, archaeology, etc. For the citizen the claims of social science, hygiene, etc., will be kept in view, while the teacher or student may especially utilize the assembly from the side of geography or of nature studies, of Scottish or general history, of modern languages and literature, or of educational problems generally.

The large element of foreign participation introduced by or through the association will be of many kinds—members of many universities, learned societies and professions, educationists from many centers, men of affairs, and workmen's delegates, each bringing some contribution of thought or inquiry during the assembly's two month's activity. Hence facilities will be arranged as far as possible in connection with the lectures in French and German for practical study and conversation in those languages, and conversely for aiding the acquirement of English by the foreign visitors. Such an intercourse can not but act toward the quickening of the intellectual and practical life, the artistic and educational activity, not only of Glasgow and Britain, but of other cities and countries.

EXCURSIONS.

Frequent excursions in Glasgow and the neighborhood will be arranged, and each Saturday a visit will be made to some place farther afield. The weekly excursions will probably be not the least attractive part of the assembly. Glasgow is the best center for excursions to the most beautiful scenery of Scotland; and in

these weekly excursions, conducted under special guidance, the historic or artistic interests, the scientific or industrial aspects of the places visited will all, as far as possible, be pointed out. These visits and excursions are intended to supply the necessary holiday outing, and at the same time to supply further illustration for some of the more general courses of lectures.

RECEPTIONS.

Conversaziones or receptions will be arranged at least weekly to afford opportunity for social intercourse among members.

CONFERENCES.

From time to time conferences will be arranged for the discussion of some points of special interest to members of the association. Among the subjects suggested are the organization of regional surveys, the study and teaching of geography, the formation and arrangement of museums, etc.

CONGRESSES, ETC.

A number of international congresses and many scientific and technical associations will hold their meetings in Glasgow during the summer. Among the latter, the British Association for the Advancement of Science, which meets early in September, and the British Medical Association may be mentioned. An important international congress on engineering will meet in the first week of September.

RESIDENCE, TRAVEL, ETC.—INFORMATION BUREAU.

An information bureau will be established to give assistance in finding suitable hotel or boarding accommodation, to answer inquiries about congresses, lectures, and the sections of the exhibition, etc. Full information will be available as to travel in Scotland, and assistance will be given in arranging tours.

The Queen Margaret Hall of Residence has agreed to receive a limited number of ladies during the assembly.

GLASGOW.

It may be well to draw attention to the importance and interest of the city of Glasgow. Although the site of an ancient and beautiful cathedral and the home of a university which this year celebrates its ninth jubilee, the city has, in modern times, become a busy port, a great center of commerce and industry, and of an intense municipal life. In the field of invention, too, Glasgow has been well represented, the name of James Watt beginning that long period of progress which that of Lord Kelvin fitly crowns.

THE GLASGOW INTERNATIONAL EXHIBITION, 1901.

This exhibition is the most important held in Great Britain since 1851. The wide interests of Glasgow in industry and commerce, science and arts, make it a most suitable place for such an exhibition. The exhibition is strongest in those departments in which the city is most interested. Thus scientific and technical interests, and especially the relations of pure and applied science, are fully represented. Raw materials, agriculture, manufactures of all sorts, mechanism and electricity, engineering and shipbuilding, transport and locomotion, all claim attention in this regard.

Education, too, has its section, grouped with science and music, and naturally technical education receives special attention. A series of daily concerts will add much to the interest of the music section. Nor is the education of the body neglected. A special section contains sporting appliances, while in the grounds a special sports arena is provided.

Industrial design finds its place with manufactures. Fine arts is a strong sec-

tion. The new municipal art gallery houses the fine-art section of the exhibition, and has been fittingly opened with an exhibit representing British art during the nineteenth century. Some representative foreign work is included, and the examples of the work of the "Glasgow school" will have a notable interest. In the same section is included Scottish history and archæology, and here a collection of relics, pictures, books, etc., has been brought together, illustrating the history of Scotland from the earliest times.

The department of social economy, so prominent in the Paris Exhibition, is not included in the official classification. Much that may be classified under this head is to be found in the women's section.

BUSINESS ARRANGEMENTS.

Early in June a full and detailed programme will be ready, containing outline syllabuses of lecture courses.

Membership of the international association (annual, \$5 or £1; life, \$50 or £10) entitles to participation in the assembly.

The local secretary and treasurer of the assembly is W. A. Lawrie Brown, 83 Bath street, Glasgow, to whom subscriptions of membership should be sent, and from whom information may be obtained. Professor Geddes will act as general secretary.

APPENDIX I.

Copy of the letter circulated at the meeting of the British Association at Dover, in 1899, by the small preliminary committee of the International Association (see page 265).

BRITISH ASSOCIATION, Dover, September, 1899.

DEAR SIR OR MADAM: Following upon the hopes and counsels of Sir Michael Foster's presidential address and upon the reunions of the British and French associations, it is felt that the time is now ripe for some more permanent organization which should maintain, develop, and utilize the good relations thus so fully initiated. It is therefore proposed to form a general and advisory committee, consisting of members of the British Association, the Association Française, and of other representatives of pure and applied science, education, art, etc., with the object of promoting arrangements for an international meeting or assembly in connection with the Paris Exposition of 1900. Sectional meetings of the committee will be held in London, Paris, New York, etc.

It is widely felt that there is not only room but need for some organization which would bring together for each of the leading departments and congresses of the exposition the specialist, the educationalist, and the intelligent public; and this on all grounds, from those of personal convenience and economy of time, money, and effort to the highest considerations of scientific progress and international amity.

It will greatly facilitate the arrangements of the committee if you will be so kind as to fill up and return the accompanying form.

We are, your obedient servants,

James Mavor.
Patrick Geddes.
G. B. Howes.
Henry Higgs.
A. Sedgwick.
A. G. Greenhill.
W. H. H. Hudson.
Marcus Hartog.
W. C. Crawford.
T. W. Bridge.
Harold Wager.
J. C. Willis.
W. G. Freeman.
J. Parkin.
George King.
A. C. Seward.
C. Eg. Bertrand.
W. Law Bros.
J. Graham Kerr.

A. C. Haddon.
Oliver Lodge.
J. J. Thomson.
A. F. Renard.
John L. Myres.
E. W. Brabrook.
Sebastian Evans.
Laurence Gomme.
E. A. Schäfer.
G. Griffith.
J. Symington.
A. Browett.
F. J. Faraday.
C. Estcourt.
J. H. Buxton.
Walter H. Coffin.
L. E. Shore.
D. H. Campbell.
Arthur R. Byles.

Arthur Lee.
Thomas R. R. Stebbing.
John Murray.
W. C. McIntosh.
James Murie.
R. F. Scharff.
J. W. Carr.
Walter Garstang.
J. W. Woodall.
Robert C. Millar.
C. H. Read.
Archibald Geikie.
Jas. T. Arm strong.
J. Burdon Sanderson.
Lister.
E. H. Griffiths.
H. H. Brindley.
D. H. Scott.

APPENDIX II.

List of the British and American general committees, Paris Assembly, 1900.

GENERAL COMMITTEE.

BRITISH GROUP.

- George Abbott, M. R. C. S.
 Sir W. M. W. Abney, R. E., C. B., etc.
 Henry Dyke Acland, F. G. S.
 Theodore Dyke Acland.
 H. Alabaster.
 Geo. S. Albright.
 Alfred H. Allen, F. I. C., F. C. S.
 E. J. Allen, director, Marine Biological Association.
 John Allen.
 Rev. F. B. Allison, M. A., F. R. A. S.
 G. L. Alward.
 J. Sparke Amery.
 P. F. S. Amery.
 Tempest Anderson, M. D., F. G. S.
 Thornton Andrews, C. E.
 John Angell, F. I. C., F. C. S.
 Jas. H. Annandale.
 Richard Armistead.
 William Armistead.
 Prof. G. F. Armstrong, M. A., M. I. C. E., F. R. S. E.
 J. Tarbotton Armstrong.
 Richard Assheton.
 Geo. Atkin, J. P.
 Rev. C. Chetwynd Atkinson, D. D.
 William Atkinson, C. E.
 Prof. John Attfield, F. R. S.
 Harold W. Atkinson, M. A.
 Prof. W. E. Ayrton, F. R. S.
 Lieut. Col. Fred. Bailey, secretary Royal Scottish Geographical Society.
 Prof. Francis G. Bailey.
 G. H. Bailey, D. Sc., Ph. D.
 Sir Robert Ball.
 Rev. Philip C. Barker, M. A., LL. B.
 Prof. Archibald Barr, D. Sc.
 Prof. W. F. Barrett, F. R. S.
 Gerald E. H. Barrett-Hamilton.
 James Barrowman, M. E.
 J. J. Barstow, J. P., D. L.
 A. B. Basset, esq., F. R. S.
 Prof. C. F. Bastable.
 Prof. H. Charlton Bastian.
 A. E. Bateman, C. M. G.
 Mrs. Batty.
 Robert E. Baynes, M. A.
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Leo R. Lewis, A. M.

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Charles DeGarmo, Ph. D.

Austin Flint, M. D., LL. D.

Waterman T. Hewett, Ph. D.

Robert H. Thurston, LL. D.

Moses Coit Tyler, L. H. D.

Horatio S. White, A. B.

Samuel G. Williams, Ph. D.

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President Benjamin Ide Wheeler.

Prof. Joseph Le Conte, LL. D.

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Prof. Albert S. Bickmore, Ph. D.

George Tate Blackstock, Q. C.

Mrs. Emmons Blaine.

Cornelius N. Bliss.

Emil L. Boas.

Eugène de Bocandé.

Miss Caroline Borden.

Amory H. Bradford, D. D.

John Graham Brooks.

Mrs. Ole Bull.

Rev. Walter Calley.

M. Jules Cambon, LL. D.

Hon. John G. Carlisle, LL. D.

Andrew Carnegie.

Paul Carus, Ph. D.

Walter Channing, M. D.

William A. Clark.

Hon. Grover Cleveland, LL. D.

William Coverley

Prof. Edward Cowles, M. D., LL. D.

Frederick M. Crunden, A. M.
 Julian T. Davies.
 Prof. George E. Dawson, Ph. D.
 Miss Julia L. Delafield.
 Right Rev. William Crosswell Doane.
 William E. Dodge.
 James Douglas.
 A. E. Dunning, D. D.
 Samuel T. Dutton, Ph. D.
 Rev. Charles C. Earle.
 Ralph M. Easley.
 Mrs. Dorman B. Eaton.
 Rev. Samuel A. Eliot.
 Rev. Daniel Evans.
 Miss Adele M. Fielde.
 Right Rev. Cyrus D. Foss, D. D., LL. D.
 Charles W. French.
 W. M. R. French.
 Washington Gladden, D. D., LL. D.
 George A. Gordon, D. D.
 Gen. A. W. Greely, War Department.
 Edward Everett Hale, D. D., LL. D.
 Rev. Frank Oliver Hall.
 Edward M. Hartwell, Ph. D.
 D. C. Heath.
 Franklin H. Head.
 Mrs. Charles Henrotin.
 Thomas Wentworth Higginson, LL. D.
 Newell Dwight Hillis, D. D.
 George Hodges, D. D.
 Mrs. Robert Hoe.
 Hon. Frederick W. Holls, LL. D.
 L. O. Howard, Ph. D.
 Mrs. Julia Ward Howe.
 W. D. Howells.
 Ray Green Huling, Sc. D.
 Prof. George F. James, Ph. D.
 Lewis G. Janes, Ph. D.
 Charles E. Jefferson, D. D.
 Mrs. Mary Morton Kehew.
 Francis H. Leggett.
 Mrs. Francis H. Leggett.
 Henry M. Leipziger, Ph. D.
 George C. Lorimer, D. D.
 Prof. Herman T. Lukens.
 Albert J. Lyman, D. D.
 Hamilton Wright Mabie, LL. D.
 William H. Maxwell, Ph. D.
 Edwin D. Mead.
 Mrs. Lucia Ames Mead.
 H. Mérou.

Arthur H. Milbury.
 Clara E. Millerd.
 George P. Morris.
 Philip Stafford Moxom, D. D., LL. D.
 Hon. James J. Myers.
 N. O. Nelson.
 Ludwig Nissen.
 Rev. Frederic P. Noble.
 Mrs. Frances Pach.
 Mrs. Alice Freeman Palmer, LL. D.
 Mrs. Potter Palmer.
 Edward H. Peaslee, M. D.
 William Potts.
 Maj. J. W. Powell.
 Josiah C. Pumpelly.
 Mrs. George Haven Putnam
 Mrs. Sylvanus Reed.
 James B. Reynolds.
 Miss O. M. E. Rowe.
 Mrs. C. A. Runkle.
 Minot J. Savage, D. D.
 Mrs. Henry M. Sanders.
 Horace E. Scudder.
 Edwin P. Seaver.
 Isaac N. Seligman.
 May Wright Sewall.
 Albert Shaw, Ph. D.
 Frederic W. Speirs, Ph. D.
 Prof. Charles Sprague Smith.
 Charles Stewart Smith.
 Henry A. Stimson, D. D.
 Richard S. Storrs, D. D.
 Josiah Strong, D. D.
 Reuben Thomas, D. D.
 Louis C. Tiffany.
 William H. Tolman, Ph. D.
 William Trelease, Ph. D.
 Ross Turner.
 Mrs. Schuyler Van Rensselaer.
 Hubert Vos.
 Charles D. Walcott, LL. D.
 Freeman L. Ward, M. D.
 John Q. A. Ward.
 Rev. Frank S. C. Wicks.
 Mrs. Charles Wilmarth.
 M. Orme Wilson.
 Mornay Williams.
 Hon. Roger Wolcott, LL. D.
 Thomas W. Wood.
 Hon. Stewart L. Woodford, LL. D.
 Robert A. Woods.

APPENDIX III.

Specimens of the weekly programmes of the Paris International Assembly:

I. ENGLISH-SPEAKING GROUPS, PROGRAMME NO. 19, SEPTEMBER 14-22, 1900.

Friday, September 14.

10.15-12.30: Visit to Rue des Nations.

10.15 a. m.: Pavilion of Great Britain.

11 a. m.: Pavilion of Hungary.

11.45 a. m.: Pavilion of Finland.

3 p. m.: Meeting of international association.

Petit Palais des Beaux Arts (Sous-Sol, south side).

Chairman: The Right Hon. James Bryce, M. P., vice-president of British group.

Reports by secretaries, work of sectional committees, etc.

4.30 p. m.: Reception and tea by the American group. Pavilion of the United States, Rue des Nations.

9 p. m.: Fête du Soir. Illumination of exposition and river.

Places reserved, as far as possible, at Sous-Sol, Palais des Congrès.

Saturday, September 15.

10.15 a. m.: Visit to section of education, Palais de l'Enseignement, Classe I, Champ de Mars.

Meet at Bureau de l'Ecole Internationale de l'Exposition, at top of N. W. staircase, in Central Hall, above retrospective collection of automobiles.

10.15 a. m.: Alternative—Visit to section of geography and geology, Classe II.

Meet at exhibit of British Geological Survey, Classe II, first floor.

11.45 a. m.: Results of exploration of Delphi.

Exhibit of Ministère de l'Instruction Publique, Classe I, first floor.

12.15 p. m.: Recent astronomical photographs.

Meet at exhibit of Harvard Observatory.

3 p. m.: Colonial sections.

Meet in lecture room, Pavillon of Canada, Trocadéro.

5 p. m.: Reception offered by the French group.

Sous Sol, Palais des Congrès, Place de l'Alma.

Monday, September 17.

10.15 a. m.: Visit to electrical section, Champ de Mars.

Meet at Musée Centennale de l'Electricité, Palais de l'Electricité, first floor.

10.15 a. m.: Alternative—Lecture: "Paris, Historic and Actual," in Petit Palais (Sous-Sol), followed by visit to Pavillon de la Ville de Paris (Pont des Invalides).

3 p. m.: Visit to exhibition of Algeria, Trocadéro.

Meet in Salle des Antiquités Romaines.

4 p. m.: Visit to Russian exposition, Trocadéro.

Meet in Salle du Chemin-de-fer trans-sibérien.

Tuesday, September 18.

10.15 a. m.: Visit to exhibition of chemistry and photography, Champ de Mars.

Meet at Musée Centennale de la Chimie.

10.15 a. m.: Alternative—Visit to Exposition de l'Art Publique, organized under the auspices of the city of Paris.

Meet at Palais des Examens, Ancien Marché Saint-Germain.

3 p. m.: Meeting of committees.

Petit Palais des Beaux-Arts (Sous-sol, at south side).

Wednesday, September 19.

10.15 a. m.: Grand Palais des Beaux Arts.

Meet at main entrance, and again at 11.30 a. m. in Musée Centennale de la Sculpture.

3 p. m.: Visit to the Pasteur Institute, Rue Vaugirard.

Meet at the institute entrance.

Thursday, September 20.

10.15 a. m.: Social economy at the exposition.

Meet at Palais de l'Economie Sociale, Salle des Chemins-de-fer. Classe 109.

2.30 p. m.: Visit to exposition annexe, Vincennes.

Meet at steamboat pier, Pont des Invalides (south end) for boat to Pont National.

Friday, September 21.

10.15 a. m.: Visit to Pavillon de Chasse, Pêche, Forêts. (South end, Pont d'Iéna.)

11.30 a. m.: Visit to North German Lloyd exhibit.

12 m.: Visit to United States Weather Bureau.

3 p. m.: Meeting of committees.

Petit Palais des Beaux Arts (Sous-sol, at south side).

5 p. m.: Reception. Offices of International Association.

Sous-sol, Palais des Congrès, Place de l'Alma.

Saturday, September 22.

Excursion to Saint-Germain (Musée d'Antiquités Nationales).

II. FRENCH GROUP—PROGRAMME NO. 19, OCTOBER 18-25, 1900.

Visite d'ensemble de l'exposition organisée pour les écoles primaires supérieures et les écoles professionnelles de la ville de Paris.

Jeudi 18:

Petit Palais des Champs-Élysées: M. E. Molinier, conservateur au Musée du Louvre.
Serres et Jardins: M. Plauzewski.

Rendez-vous: Porte du Petit Palais à 9 h. du matin.

Vendredi 19:

Rue des Nations: M. Frantz Jourdain, architecte, président de la classe 71.

Rendez-vous: Petit Palais des Champs-Élysées salle de l'École internationale, à 9 h. du matin.

Samedi 20:

Esplanade des Invalides:

Vitrail et tapisserie: Max Choublier.

Mobilier et bijoux: M. Delvolve.

Céramique: M. Granger, professeur de technologie céramique à l'École d'Application de la Manufacture de Sèvres.

Rendez-vous: Porte 23, Quai d'Orsay, à 9 h.

Lundi 22:

Palais de l'Économie Sociale et des Congrès: M. Gide, professeur à la faculté de droit, rapporteur de l'économie sociale pour le rapport général de l'exposition: Histoire d'une vie d'ouvrier.

Pavillon de la ville de Paris:

M. Masson, inspecteur général de l'assainissement de Paris.

M. le Dr. A. J. Martin, membre du comité consultatif d'hygiène publique de France et du Conseil supérieur de l'assistance publique, etc., rapporteur du comité de la Classe III.

Rendez-vous: devant le Palais de l'Economie Sociale, en face la passerelle de l'École Internationale, à 9 h. du matin.

Mardi 23:

Trocadéro:

Les Colonies françaises et étrangères: M. Noufflard, chef du service commercial à l'office colonial.

Rendez-vous: Pavillon de l'administration des colonies (porte Delessert), à h. du matin.

Mercredi 24:

Champ de Mars: M. Léon Guillet, ingénieur des arts et manufactures.

Métallurgie, industries chimiques, électrochimie, blanchiment, teinturerie.

Rendez-vous: Palais des Mines et de la Métallurgie, porte d'angle proche de la tour Eiffel, à 9 h. du matin.

Jeudi 25:

Champ de Mars: M. Guillet, ingénieur civil.

Génie civil et transports, galerie des machines, électricité.

Rendez-vous: Palais du génie civil, porte centrale (près l'exposition rétrospective de la locomotion), à 9 h. du matin.

APPENDIX IV.

CLASSIFIED LIST OF THE LEADING INTERNATIONAL CONGRESSES HELD AT THE PARIS EXPOSITION OF 1900.

I.—*Art.*

Music.....	June 14 to 18.
Photography.....	July 23 to 28.
Dramatic art.....	July 27 to 31.
Architecture.....	July 30 to August 4.
Municipal art.....	August 8 to 16.
Teaching of art.....	August 29 to September 1.

II.—*Mining, engineering, and applied science.*

Gold and silver assaying.....	June 11 to 13.
Mines and metallurgy.....	June 18 to 23.
Automobiles.....	July 9 to —.
Testing of materials.....	July 9 to 16.
Steam engines, etc.....	July 16 to 18.

Applied mechanics	July 19 to 25.
Applied chemistry	July 23 to 28.
Fire brigades	August 12 to —.
Thread numbering	September 3 and 4.
Gas	September 3 to 5.
Tramways	September 10 to 13.
Aeronautics	September 15 to 20.
Railroads	September 20 to 23.
Acetylene	September 22 to 28.

III.—*Maritime affairs.*

Naval architecture and construction	July 19 to 21.
Navigation	July 28 to August 3.
Chronometry	July 28 to August 4.
Merchant marine	August 4 to 12.
Maritime law	October 1 to 3.

IV.—*Mathematical, physical, and chemical science.*

(See also under Maritime affairs.)

Applied mechanics	July 19 to 25.
Applied chemistry	July 23 to 28.
Chemistry	August 6 to 11.
Mathematics	August 6 to 11.
Physics	August 6 to 11.
Electricity	August 18 to 23.

V.—*Natural science.*

Ornithology	June 26 to 30.
Alpinists	August 12 to 14.
Geology	August 16 to 23.
Meteorology	September 10 to 16.
Botany	October 1 to 6.

VI.—*Agriculture and forestry.*

Horticulture	May 25 to 27.
Forestry	June 4 to 7.
Agricultural stations	June 18 to 20.
Viticulture	June 20 to 23.
Cattle feeding	June 21 to 23.
Agriculture	July 1 to 7.
Agricultural cooperation	July 8 to —.
Apiculture	September 10 to 12.
Fruit culture and arboriculture	September 13 to 14.
Aquiculture and fisheries	September 14 to 19.
Wine and cider making	October 12 to 13.

VII.—*Medicine, hygiene, etc.*

Homeopathy	July 18 to 21.
Professional medicine	July 23 to 28.
Medical press	July 27 to 29.
Electrology and medical radiology	July 27 to August 1.
Pharmacy	August 8 to —.
Medicine	August 2 to 9.
Dermatology	August 2 to 9.
Dentistry	August 8 to 14.
Hygiene	August 10 to 17.
Hypnotism	August 12 to 15.
Physical education	August 30 to September 6.
Pharmacy specialties	September 3 and 4.

VIII.—*Anthropology, archaeology, and history.*

Numismatics	June 14 to 16.
Comparative history	July 23 to 28.
Anthropology and prehistoric archaeology	August 20 to 25.

Ethnography	August 26 to September 1.
Basque studies	September 3 to 5.
History of religion	September 3 to 8.
Folklore	September 10 to 12.
Americanists	September 17 to 21.

IX.—*Education.*

(See also X, etc.)

Fencing	June 8 to 10.
Music	June 14 to 18.
Modern language teaching	July 24 to 29.
Higher education	July 30 to August 4.
Secondary education	July 31 to August 6.
Primary education	August 2 to 5.
Philosophy	August 2 to 7.
Educational press	August 9 to 11.
Stenography	August 9 to 15.
Bibliography	August 16 to 18.
Psychology	August 23 to 25.
Teaching of art	August 29 to September 1.
Physical education	August 30 to September 6.
Popular education	September 10 to 13.

X.—*Technical, social, and commercial education.*

(See also XI, XV, etc.)

Agricultural education	June 14 to 16.
Teaching of social science	July 30 to August 3.
Technical and industrial education	August 6 to 11.
Social education	September 6 to 9.

XI.—*Geographical and colonial questions.*

Colonies	July 30 to August 5.
Colonial sociology	August 6 to 11.
Economic and social geography	August 27 to 31.

XII.—*Industry and commerce.*

Grocery trade	June 13 to 15.
Ramie	June 23 to 30.
Commercial travelers and agents	July 8 to 11.
Baking trade	July 16 to 18.
Wine and spirit trade	July 16 to 21.
Commerce and industry	July 23 to 28.
Tariff regulations	July 30 to August 4.
Milling trade	August 9 to 11.

XIII.—*Property and finance.*

House property	May 28 to June 2.
Movable property	June 4 to 7.
Joint stock companies	June 8 to 12.
Landed property	June 11 to 13.
Insurance	June 23 to 30.
Actuaries	June 23 to 30.
Copyright (literary and artistic)	July 16 to 21.
Industrial property and copyright	July 23 to 28.
Comparative law	July 31 to August 4.
Inventors' associations	September 10 to 13.

XIV.—*Literature and the press.*

Press associations	July 23 to 26.
Medical press	July 27 to 29.
Educational press	August 9 to 11.
Stenography	August 9 to 15.
Librarians	August 20 to 23.

XV.—*Labor and cooperation.*

Friendly societies	June 7 to 10.
Young workmen's aid societies	June 11 to 13.
Housing	June 18 to 21.
People's credit banks	July 8 to 10.
Workmen's cooperative productive associations	July 11 to 13.
Cooperative societies	July 15 to 17.
Profit sharing	July 15 to 18.
International cooperative alliance	July 18 to 22.
Workmen's protection and compensation	July 25 to 31.

XVI.—*Women.*

Women's work and institutions	June 18 to 23.
Women's rights	September 5 to 8.

XVII.—*Philanthropy.*

Housing	June 18 to 21.
Vegetarian	June 21 to 23.
Discharged prisoners' aid	July 9 to 12.
Life saving and first aid	July 17 to 23.
Poor relief	July 30 to August 5.
Blind	August 5.
Deaf-mutes	August 6 to 8.
Antislavery	August 6 to 9.
Red Cross	August 20 to 25.
Abuse of tobacco	August 20 to 25.
Sunday rest	October 9 to 12.

XVIII.—*Peace.*

September 29 to October 6.

CHAPTER VII.

EDUCATIONAL TRAINING FOR RAILROAD SERVICE.

[The Annual Report of the Commissioner of Education for 1898-99 contained in Vol. 1 a chapter on Educational Training for Railroad Service (see pp. 871-955), prepared by Mr. J. Shirley Eaton, which gives an account of what higher seats of learning, and especially technological institutions, do to prepare engineers and other special employees of railroads. This account has been a welcome source of information. The question of a specific preparation for railroad service is being discussed by technologists and railroad men, it becoming more and more clear that much waste can be avoided by such a preparation. The St. Louis Railway Club and the Illinois Society of Engineers and Surveyors have recently discussed the technical schools and their relation to railroads, and since the leading papers read before these two associations may be regarded as supplements to the contribution of Mr. Eaton they are here reproduced in full. The first is by Prof. L. P. Breckenridge, of the University of Illinois; the other by Prof. Edward C. Schmidt, of the same institution. Both gentlemen are well acquainted with the subject, since both are engaged in preparing students for railroad mechanical engineering. It must be understood that they use the term "technical school" in the wider sense in which it is commonly called technological school. In continental Europe the term technical school is used for any institution in which mono-technical instruction is given; the term as it is used in the following papers refers to poly-technical institutions. The courses of study mentioned are, however, those of the department of engineering in colleges of the mechanic arts. In stating the enormous extent of the railroad interests as a factor of the present industrial life in this country, the authors, naturally, prove the necessity of special departments for railroad engineering, and since both are practical inventors of railway test cars, they may be considered as not speaking merely "ex cathedra."]

THE AMERICAN TECHNICAL SCHOOL AND ITS RELATION TO RAILROADS.¹

[By L. P. Breckenridge, professor of mechanical engineering, University of Illinois, Urbana, Ill.]

The nature of the many questions asked the writer by persons unacquainted with the work and scope of the American technical school, suggests the preparation of a paper which shall give certain facts familiar to all the teaching profession, but seldom brought to public notice in an easily digested form.

Still another reason exists in my mind for the subject chosen. Each year the technical school and industrial interests of the country are coming more and more into closer, agreeable, and profitable relations with each other. If this subject could be presented so as to draw from any of you a frank statement of what

¹ Read to the St. Louis Railway Club.

you have found to be the difficulties with men fresh from the school; if you would suggest ways occurring to you wherein the school fails; if you would acknowledge wherein the school has been helpful, you may be sure that all American technical schools would profit by your suggestions and be grateful for words of commendation or of criticism.

The American technical school is represented to-day first by the endowed technical school, supported by the interest on securities donated to the school by some generous benefactor, together with the tuition fees of the students. Such are the Troy Polytechnic, Sheffield Scientific School of Yale, Worcester Polytechnic, Lehigh, Leland Stanford, Stevens Institute, Rose Polytechnic, and others.

It is represented also by the technical departments of the State universities, receiving its support partly by the Federal Government, but largely supported by State appropriations, the fees of the student being in most cases merely nominal. Still other schools enjoy the support of both national Government and State aid, as well as that of private benefactions. Such are Sibley College of Cornell University, Massachusetts Institute of Technology, Columbia, University of California, Purdue, and others.

Nearly every State in the Union has now located and is building up and supporting a State university, and some technical instruction is given in all of these institutions.

The geographical location, the available funds, and the make-up of the board of control determined the character of the earlier technical instruction, but the older and larger of these institutions offer courses of study in nearly all the branches for which there appears a demand.

The meaning of a technical education, as usually implied and as used by the writer, is an education into a knowledge of the useful arts, and leading more specifically into some branch of engineering. It does not imply the education of the mechanic in the trade school, which occupies its distinct and useful place and not infrequently furnishes excellent material for more advanced technical training.

The technical school teaches the live languages in place of the dead languages. It teaches mathematics, the effective tool of the engineer, not the ornament of the mathematician. It teaches chemistry, physics, and mechanics as a compass, as a protection, and as a foundation for the superstructure which is to follow, and on this foundation is built the useful and honorable profession of engineering.

The diversity of interests and the multiplicity of public needs and requirements necessarily demands a division of engineering labor, and, while a few years ago the civil engineer knew how to do everything in a technical line, at present there is abundant additional opportunity for the labors of the mechanical, mining, electrical, hydraulic, sanitary, architectural, railway, and naval engineer, while a place is rapidly being opened up for the pneumatic, gas, chemical, and commercial engineer.

The steps in the education of the American engineer are the kindergarten, the grade school, the high school, the State university or endowed technical school, and practice in the chosen profession. The kindergarten exists in every home, but often has neglectful teachers. The grade school exists in every group of country homes as well as in every town, both large and small. In it are educated by far the greater number of American youths. The high school exists in the larger towns and cities and varies in effectiveness and value, depending upon the enthusiasm, local pride, and generosity of its patrons.

The State university receives the graduates of the high schools and obtains its support from the State in much the same way that the high school is supported by the city or town.

The establishment of a national university has not yet been accomplished, and

the project meets with considerable opposition from those who have given the subject their most careful consideration.

I take it that all of you are entirely familiar with the steps of education which carries the student through the high school—everywhere is the American school-house—and many of our cities have high schools of exceptional merit, their course of instruction is excellent, their equipment is complete, their architectural design and appointments magnificent.

In most of the States west of the Alleghenies the educational step beyond the high school is the State university. These are, for the most part, the outgrowth of what was formerly known as the "land-grant college."

The land-grant colleges were the result of early legislation by the General Government. Senator Justin S. Morrill, of Vermont, introduced the land-grant bill into Congress in 1858, and secured its passage only to see it vetoed by James Buchanan, then President of the United States. Not to be subdued, the bill was again introduced into the next Congress, and the next, until finally the measure became a law in 1862, when, on July 2, the hand of Lincoln signed the act of Congress which granted to the several States public lands—"30,000 acres for each Senator and Representative in Congress"—from the sale of which there should be established a perpetual fund, "the interest of which shall be inviolably appropriated by each State which may take and claim the benefit of this act, to the endowment, support, and maintenance of at least one college, where the leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts in such a manner as the legislatures of the States may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life." The act forbade the use of any portion of this fund, or interest thereon, for the erection or maintenance of any buildings, and the several States claiming and taking the benefit of the provisions of the act were required, by legislative assent previously given, "to provide within five years, at least, not less than one college" for the carrying out of the purposes of this act.

The wisdom of the act just cited becomes more and more evident as time goes on. It was but the beginning of an era of popular enthusiasm in favor of practical education. The States, notably in the West, have generously augmented the gifts of the General Government, and in some cases the wealth of individuals has been added to both, notably the gift of \$4,000,000 to California State University by several philanthropists, followed by the Phoebe A. Hearst architectural competition plan for the building of the entire university, Mrs. Hearst giving \$300,000 to pay for all expenses of competition.¹ The first prize, \$10,000, has just been awarded to E. Benard, of Paris.

The States obtained very variable returns from the sale of the lands, some obtaining but 41 cents an acre, and from this up to \$5.57 an acre. On this account what was intended to be an equitable allotment proved to be, in this, far from it.

In 1890 the Hatch act was passed, giving to each college established under the previous act funds which will soon amount annually to \$25,000. This amount, however, was appropriated for agricultural experiments.

It is hoped that a similar bill may soon be passed for establishing "engineering experiment stations."

The University of Illinois is a representative State university, and the familiarity of the writer with this institution is sufficient excuse for using it to illustrate what is believed to be the object, scope, and plan of operation of all similar institutions, within the limit set by the pride and the financial support given to it by the citizens of the State which it represents.

¹ Review of Reviews, October, 1899.

The University of Illinois is made up of four colleges, as they are called, namely:

1. The College of Agriculture.
2. The College of Literature and Arts.
3. The College of Science.
4. The College of Engineering.

Besides the colleges it includes various so-called schools, such as the school of law, medicine, pharmacy, music.

The university policy, as relates to methods of instruction, courses of study, and general plan of operation is determined by the university faculty, consisting of the heads of all university departments. The college faculty includes all members of the corps of instruction in that particular college, and this body takes action on all matters which relate to its college only.

The head of each college is known as the dean, and the college is made up of departments in charge of a professor, aided by associate professors, assistant professors, instructors, assistants, and fellows.

The College of Engineering is then one of the colleges of the State university, and in it the student receives his technical education. Admission to the College of Engineering is possible in three ways: (a) By certificate from fully accredited high school. (b) by examination, (c) by transfer of credits from some other college or university. There are in the State of Illinois about 250 high schools; of these, 162 are on the accredited list of the university for all or a part of their work. Applicants must be at least 16 years of age.

A law passed by the general assembly of the State of Illinois at the session of 1895 provides that there shall be annually awarded to each county of the State one State scholarship, which shall entitle the holder thereof to instruction in any department of the university for a term of four years, free from any charge for tuition or incidental charge, except it be for materials used or damage done to university property. Entrance examinations under this law are in charge of the superintendent of public instruction, and competitive examinations are held upon the first Saturday in June at each county court-house of the State.

The subjects upon which entrance examinations are held for admission to the College of Engineering are as follows:

<i>Prescribed list.</i>		Credits.
Algebra (through quadratics).....	4	4
Geometry (plane, solid, and spherical).....	4	4
English composition.....	3	3
English literature.....	6	6
French, or German, or Greek, or Latin.....	6	6
History.....	3	3
Physical or biological science.....	3	3
		29
<i>Elective list.</i>		Credits.
Astronomy.....	1 to 1½	1 to 1½
Biology.....	3	6
Botany.....	1½	3
Chemistry.....	2	3
Civics.....	1	3
Drawing.....	1	3
French, or German, or Greek, or Latin.....	3	9
Geology.....	2	3
Manual training.....	1	2
Physics.....		3
Physiography.....	1	3
Physiology.....	1½	3
Zoology.....	1½	3

Each student is required to pass examinations in all studies of the prescribed

list, and enough from the elective list to aggregate 7 credits, making in all 36 credits for admission. A credit being equal to one subject pursued in a high school for twelve weeks with daily recitation. Admission by transfer of credits is obtained by filing of certificate of honorable dismissal from the college from which the student comes, and submitting credits for work done at another institution to a special committee appointed to report on these special cases.

Persons over 21 years of age, not candidates for a degree, may be admitted to classes when they possess the requisite information and ability to profitably pursue the chosen subjects.

It is not necessary that a student be a resident of the State of Illinois to enter the university, the only requisite for admission being ability to pass the examinations and a good moral character.

The work of the student after entering the College of Engineering depends somewhat upon the course of study which he elects to pursue. The courses of instruction offered at present are:

1. Architecture and architectural engineering.
2. Civil engineering.
3. Electrical engineering.
4. Mechanical engineering.
5. Municipal and sanitary engineering.
6. Railway mechanical engineering.

All of these courses are similar as far as their work pertains to such foundation studies as mathematics, physics, mechanics, elements of drafting, and chemistry. Similar also in their work pertaining to culture studies, composition, rhetoric, English, French, German, Spanish, economics, ethics, and history. They differ in the several departments, in that each department applies the principles of these fundamentals to the special examples, problems, designs, constructions, and duties which will naturally follow in the chosen profession.

In each department the special studies of the course number about twenty-one, divided as follows: (a) Recitations, (b) drawing and design, (c) shop or field work, (d) laboratory work, the amount of work depending upon the particular course. As an example of a four years' course of study it seems appropriate to give here the course laid down as the course in railway mechanical engineering at the University of Illinois:

First year.

1. Advanced algebra and trigonometry.
2. German, or French, or Spanish, or English.
3. Elements of drafting, descriptive geometry, lettering, and sketching.
4. Shop practice in pattern making, foundry work, and forge work.
5. Military tactics and drill.
6. Physical training.

Second year.

1. Differential and integral calculus.
2. Physics, experimental lectures, and laboratory practice.
3. Drafting, elements of machine design.
4. Shop practice in machine work and bench work.
5. Rhetoric.
6. Military training.

Third year.

1. Analytical mechanics, resistance of materials, and hydraulics.
2. Chemistry.
3. Kinematics—the relative motion of bodies.
4. Surveying.
5. Electrical machinery.
6. Steam engines and boilers.
7. Laboratory practice in steam engineering and power measurements.

Fourth year.

1. Thermodynamics - theory of heat engines.
2. Mechanics of machinery.
3. Locomotive engines and locomotive design.
4. Railway shop systems.
5. Compressed air in railway service.
6. Advanced designing.
7. Seminary—review of railway periodicals and society transactions.
8. Laboratory practice—locomotive road tests and dynameter car tests.
9. Thesis.

The first three years of this course is identical with the straight course in mechanical engineering, but during the last year, as is usual in all departments, particular stress is laid on the specialties of mechanical engineering as applied to railway problems.

It will be seen from this example that for the first three years the time of the student is largely spent in becoming thoroughly grounded in the fundamentals, learning, as it were, the names of the mental tools of the engineer, and which of them should be used in the solution of various problems, just as he learns in the shops what metal tools there are to be used in the various mechanical problems of construction and destruction.

During the last year some time is spent in advanced theoretical work, but a considerable time is taken up in the application of the previous teachings, while the student is still under the eye of his teacher. More and more he is thrown on his own resources and pushed into positions of responsibility requiring independent judgment and thought. He begins now to see the "use of things," where all along he has had his doubts. He puts more confidence in his teachers, becomes interested and absorbed in the work, accomplishes much more than ever before, and realizes that his time is short in the gold fields of education and that he soon must commence life where all successful engineers have started, at the bottom of the ladder and work up. The thesis is his last and best independent effort before graduation, and not infrequently shows the individual himself, as well as his teachers, about what four years of time and study has amounted to in fitting him for a starting place in the chosen work.

The expenses of the student in the College of Engineering are about as follows:

Matriculation fee (for each student not holding a State scholarship) payable upon admission	\$10.00
Diploma fee, payable before graduation	5.00
Incidental fees, payable each year	24.00
Special students (not candidates for a degree, pay in addition to above incidental fees), each year	15.00
Laboratory fees for materials used vary in different departments and during different years; average per year	10.00
Room rent, board, fuel, light, washing, at private houses, varies from	\$160.00 to 200.00
Books, drawing instruments, and miscellaneous supplies, average cost per year	25.00

The university makes no provision for room and board, but these may be easily obtained at reasonable rates at Champaign or Urbana, in which town the university is located. The stranger never knows where one town "leaves off" and the other "begins," and there exists no reasonable excuse for the two towns. The total expense per college year may be as low as \$300, but in most cases \$300 would be a safe estimate as the necessary expense. Of this the university receives less than \$30 per year, including matriculation and graduation fees.

Some of the special features of technical instruction are its shops, laboratories, and drafting rooms. Considerable difference of opinion exists as to the usefulness of shops in this system of education. My observation is that the "Worcester" system is right at Worcester; the "Lehigh" system is right in Pennsylvania, and the "Illinois" system is right in Illinois.

It is evident that the same system is not possible or desirable in the heart of

manufacturing communities and in the center of a vast agricultural district. In any place shops are a desirable feature of a technical school. In all of our Western institutions they are an absolute necessity.

It makes a vast amount of difference whether a boy's early environment is shops, mill, and factories, or whether it is corn fields and prairie. In the technical school shop the object is not to make skilled workmen, although this result is frequently obtained. The rule of the school shop is: "As soon as a student knows how to do a thing, put him at something else."

The total time spent in the shops is comparatively short. At the University of Illinois the students in mechanical, electrical, and railway engineering departments spend 180 hours in the pattern shop, 90 hours in the foundry, 90 hours in forge shop during their first year, and 270 hours in the machine shop the second year, making a total of but 630 hours (=63 days) in the four shops. In this short time spent under competent instructors, each a specialist, it is truly surprising how much is accomplished. It is here that a student gets a chance to use his hands in acquiring education, and the education which reaches us through our hands stays with us better than that which comes through any other channel.

The shop does not undertake to manufacture articles for sale; if it does, there immediately springs up a tendency to keep students too long on the same kind of work. There may sometimes be one or two special articles advantageously made and sold, and there will always be work on additions to the equipment, but no large amount of commercial work can be undertaken to advantage. The operation of shops is expensive, and the cost of material used up and tools broken amounts to approximately \$2,000 a year at the University of Illinois for about 150 students. The machines wear out and become out of date, and must be replaced by modern tools, or else the education is liable to be behind the times. If I were to enumerate some of the advantages of the school shop to the technical student, I should emphasize the following:

- (a) It teaches the student to do something with his hands.
- (b) It leads him to use his judgment and accustoms him to use brain and hand together.
- (c) It enables him to become familiar with the characteristics and properties of the materials of engineering.
- (d) It acquaints him with the possibilities and impossibilities of construction as modified by the equipment of tools.
- (e) He learns how to read drawings.
- (f) It makes his future work in designing easier and keeps it out of many pitfalls.
- (g) It makes him more sympathetic with workmen in general.
- (h) It serves to exemplify the teachings of the class and lecture room.
- (i) It is good physical exercise.

The engineering laboratory for the use of students is an American institution. It has followed, as a natural consequence, the successes of the laboratory methods of physics, chemistry, botany, zoology, biology, and other sciences. It is doubtless the most expensive of all to install, to maintain, and to operate. It is in the extent of its engineering laboratory equipment that one engineering school outstrips its rival more than in any other particular. It seems also true that if any one thing attracts students to one school more than to another it is this same superior laboratory equipment.

At two of the leading American technical schools the appliances and equipment used for engineering laboratory purposes are inventoried at over \$850,000. The methods of the laboratory are the methods of investigation, systematic and scientific experimentation. Familiarity with the instruments of his profession is followed by problems of increasing difficulty and by tests of machines and materials involving more and more care, preparation, and thought.

The natural and intense desire of the average American "to see the wheels go round," to see what is "inside of things," to know "why and how it works," to make it work himself, insures success to engineering laboratory methods.

The nature of the experiments performed by the students covers a wide field and reaches into almost all realms of industrial and commercial enterprise.

I can only enumerate some of the main lines of investigation, each of which has been extended almost indefinitely in all directions:

(a) Tests of strength of materials (wood, iron, steel, cement, stone, brick, mortar, beams, columns, cable, ropes, belts, joints, chains, springs, pipes, hose, stay bolts, drawbars).

(b) In hydraulics—test of turbines and motors, water meters, hydrants, hose, nozzles; flow of water over dams, weirs, notches, through rivers, canals, pipes, and orifices; action of water under impact, compression, freezing.

(c) In steam engineering—evaporative performance of all types, sizes, and designs of steam boilers; tests of the efficacy of various types or kinds of grate bars, furnaces, stokers, economizers, feed water heaters, pipe coverings, injectors, and superheaters. Tests of all types, sizes, and kinds of steam engines, to determine their economical performance under the most variable conditions; high speed versus low speed; throttling versus automatic cut-off; condensing versus noncondensing; high pressure versus low pressure; compound versus simple; jacketed versus not jacketed; the duty of pumping engines; the steam consumption of pumps, pulsometers, air compressors, steam turbines and heating systems.

The same long line of tests as applied to steam engines are duplicated with electrical generators and motors, with gas engines and hot-air engines, with air compressors and pumping engines, with locomotives, with refrigerating machines, with windmills; in fact, nothing escapes the instruments of the experimental engineer.

(d) In railway mechanical engineering much has been done in regular laboratory work; many of the schools have carried on successful "road tests" of locomotives; at least two schools (Purdue and Columbia) own locomotives and have them mounted for testing, and much valuable work has been done in this way.

One school (University of Illinois) has recently equipped a dynamometer car, cooperating in this with the Peoria and Eastern division of the Cleveland, Cincinnati, Chicago and St. Louis Railway, and much important work is being accomplished with this equipment, which is being rapidly augmented and improved. Besides this, numerous miscellaneous tests have been made, such as scale tests, brake-shoe tests, air-brake tests, lagging tests, fuel tests, nozzle tests, oil tests, fire-kindling tests, water-supply apparatus tests, all relating more specifically to railway work, while many of the regular tests of materials and steam and electric specialties apply as well to railways as to other lines of engineering practice.

The value to the student of his laboratory experience might be outlined as follows:

(a) It teaches him to locate wastes (of material, of fuel, of power).

(b) It teaches systematic methods of investigation.

(c) It exercises his ability to make a clear written statement of the results obtained.

(d) It familiarizes him with the various types of commercial appliances used in practice.

(e) It gives him confidence in his own ability to do things.

(f) It fixes in his mind the useful constants, methods, and records of engineering practice.

I have added below several tables of statistics relating to the American technical schools. These I will not undertake to read, but they may prove of some interest when appearing in the proceedings.

(Very complete articles on this subject may be found in the Transactions of the

American Society of Mechanical Engineering, article by R. H. Thurston, Vol. XIV, 1893; also Engineering News for 1892 and 1897.)

Some of the principal engineering schools in America, attendance, expenses, etc.

School.	Yearly tuition.	Estimated living expenses.	Attendance in engineering, 1899.	Location.
1. Massachusetts Institute of Technology.	\$200	\$240 to \$320	936	Boston, Mass.
2. Cornell University.....	100	200 325	713	Ithaca, N. Y.
3. Sheffield Scientific School (Yale).	155	160 600	567	New Haven, Conn.
4. Columbia University.....	150	300 540	380	New York, N. Y.
5. Purdue University.....	Free.	150 ---	377	Lafayette, Ind.
6. Ohio State University.....	Free.	150 250	338	Columbus, Ohio.
7. University of Illinois.....	Free.	150 225	287	Urbana, Ill.
8. Lehigh University.....	\$100	225 340	267	S. Bethlehem, Pa.
9. University of Michigan.....	\$25 to \$35	300 ---	240	Ann Arbor, Mich.
10. University of Wisconsin.....	100	150 300	236	Madison, Wis.
11. Lawrence Scientific (Harvard).	150	240 350	217	Cambridge, Mass.
12. Stevens Institute of Technology.	150	250 450	214	Hoboken, N. J.
13. University of California.....	Free.	150 250	200	Berkeley, Cal.
14. Missouri State University.....	\$5	150 250	185	Columbia, Mo.
15. University of Minnesota.....	Free.	200 275	183	Minneapolis, Minn.
16. University of Pennsylvania.....	\$200	150 210	180	Philadelphia, Pa.
17. Pennsylvania State College.....	Free.	200 ---	158	State College, Pa.
18. Rensselaer Polytechnic Institute	\$200	300 500	142	Troy, N. Y.
19. Iowa Agricultural College.....	Free.	150 225	137	Ames, Iowa.
20. University of Kansas.....	Free.	150 225	112	Lawrence, Kans.
21. Alabama Polytechnic Institute.	Free to \$20	150 200	101	Auburn, Ala.
22. State College of Kentucky.....	Free to \$15	150 200	96	Lexington, Ky.
23. Western University of Pennsylvania.	100	150 200	95	Allegheny, Pa.
24. Leland Stanford, jr., University.	Free.	225 300	85	Paloalto, Cal.
25. Tulane University.....	Free to \$20	250 400	78	New Orleans, La.
26. Princeton University.....	120	170 500	69	Princeton, N. J.
27. West Virginia University.....	Free to \$37.50	130 200	54	Morgantown, W. Va.
28. University of Iowa.....	25	225 ---	27	Iowa City, Iowa.

¹ Includes some students in chemistry.

The foregoing table does not pretend to be more than approximate in order to give some ideas concerning this subject. Where tuition is "free" there are usually certain fees, amounting to from \$10 to \$40 a year, to cover laboratory materials used, etc. Schools omitted from this list were omitted because the writer did not have recent catalogues. It is probable a complete list would include 50 schools. It is believed, however, the above schools contain 85 per cent of the students attending American technical schools.

The relation of the American technical school to the railroads is both direct and indirect.

It is direct when the school supplies the graduate in civil engineering who develops into the surveyor, the superintendent of new constructions, such as roadbeds, tunnels, bridges, culverts, elevated tracks, piers, water towers, etc., the engineer of maintenance of way, or the bridge engineer; when it supplies the graduate in mechanical engineering who develops into chief draftsman, designer, engineer of tests, shop foreman, master mechanic, superintendent of machinery, or superintendent of motive power; when it supplies the graduate of electrical engineering who develops into electrical expert in matters relating to electrical machinery, electrical transmission, telegraphy, telephony, electric lighting, traction, and signaling; when it supplies the graduate of architectural engineering as designer of terminal stations and their appliances for heating, ventilation, plumbing, etc., as well as designer for way stations, depots, freight houses, elevators, shops, and miscellaneous structures; in fact, when any of its graduates are developed into

positions of responsibility and trust anywhere along the line from lowest to highest.

The relation is indirect when the graduate serves to aid by his scientific attainments the development of any of the great industrial or commercial interests of the State or nation, upon the success of which the growth of railroads depends. It is indirect when the graduate enters the field of technical journalism and devotes his energy to the collection, collation, and publication of the results of the world's progress in railway engineering.

It is indirect when the graduate enters the laboratory for research and determines new engineering constants, checks up old ones, or investigates any of the constantly increasing problems which relate to the construction or operation of the simpler machines for the saving of labor, to the perfection of inventions, or the prevention of waste in the transformation of energy.

It is indirect when the graduate fits himself for the duties of a teacher who shall direct again the steps of those following, helping them to avoid the mistakes others have made, pointing out the sources of information in their special lines, molding their lives into systematic investigators, inspiring them by always seeking for the truth in nature, into living lives of truth and fearless adherence to principles of right and justice, not only when dealing with crude materials, but also when dealing with their fellow-men.

The power required in the operation of any industry is somewhat of an index to its position as an important element in the total industrial development and support of our great nation.

In this connection I present the following diagram¹ showing the total available steam power in the United States and its division into three parts, as indicated.

It will be seen that nearly two-thirds of all our power is used in the transportation of materials to the factory and again to the consumer. It also indicates the growth of all railway interests, for it is evident that this available power for operating grows with the growth of the road. Two-thirds of the fuel used for power purposes is probably consumed by the locomotives of our railroads. The probable growth in the near future seems destined to follow the law prescribed by past growth. If it were possible for human hands to perform the work now available in steam power, it would require at least 300,000,000 workmen to do it.

The cost of one horsepower per year, for a period of ten hours a day, varies according to locality, but may be stated at \$15 to \$25 per year. It would require 15 men to perform the same labor, working ten hours a day, six days per week, and the cost of this labor at \$1.50 a day would amount to approximately \$7,000.

It is evident that no nation can expect to advance that does not take every advantage of steam power in the performance of all kinds of labor.

The American railroads require for their direct operation 1,000,000 operators, representing approximately 5,000,000 of our population directly dependent upon railroads. The indirect labor required to supply the railroads with fuel, iron, steel, timber, and other supplies is an untold quantity.

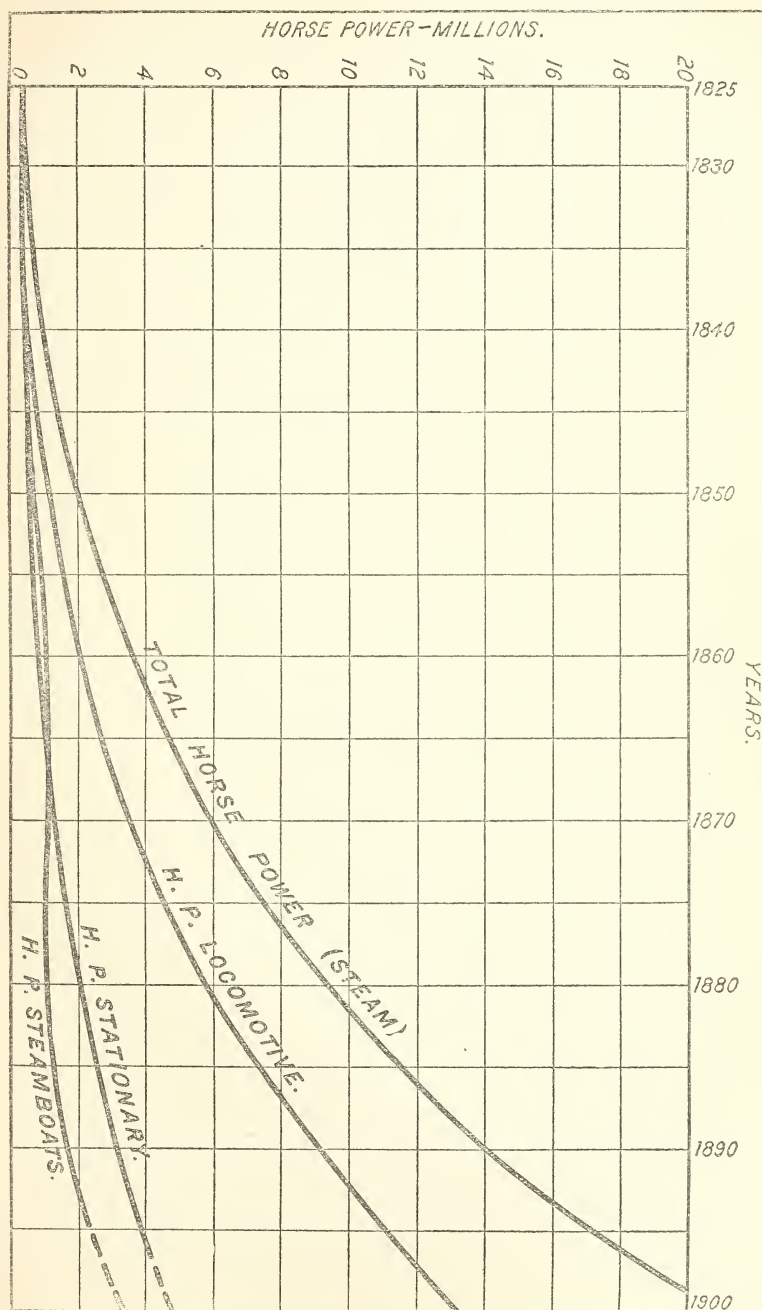
The successful road is alert to obtain all of its supplies of the best possible quality, and not only are its specifications rigid, but its inspection and its tests are careful and more and more scientific.

No one thing may claim especial preeminence and credit for the wonderful development of the American railroad. Great as has been its advance, it is but the result of the sum total of our natural progress. Fuel is supplied cheaper; better steel is provided for rails and for boiler plate, allowing higher speeds on account of safer road beds and higher steam pressure.

Steel castings are replacing iron castings; special machinery for construction

¹ See Thurston's Growth and Development of the Steam Engine.

and repairs has been perfected; compressed air has replaced hand labor to much advantage. The flexibility of the electric light is of much value, and the electric



motor is frequently installed to advantage. Improved methods of signaling and interlocking add safety with increased speed.

Cars are loaded with 100,000 to 120,000 pounds of ore and coal. Brook's locomotive No. 640, recently put in service on the Illinois Central Railroad, weighs 232,200 pounds.

Appliances for facilitating office work have kept pace with other departments, and the telephone, phonograph, typewriter, duplicator, time recorder, all must be given their due share of credit.

All of these devices, all of this improved material, is available and can be secured by all railroads, and yet some roads are not successful. There is one thing needful—one thing absolutely necessary to success, and that is the right man in the right place in each and every department of railway management.

Everyone, from president to shop or road foreman, feels that the success of his enterprise depends more upon having the right man in the right place than upon any other thing. Time and again officers and chief engineers scan the ranks looking for the right man to fill a position of responsibility—sometimes with success, often with failure when compared with their ideal.

It is to this point that I have tried to lead your thought: The American technical school will supply railroads with men. Not laborers, but leaders; not imitators, but originators; not through any process of favoritism, but because of real ability and worth; not because of what the school teaches of railroads, but because what it does teach is the basis and foundation of the science of construction and operation of railroads.

The writer believes that the present grand success attained in railway development has been accomplished with comparatively little help from the technical school. It has been attained by hard and persistent effort, and by the devotion of years of patient toil, energetic thought, careful judgment, and ceaseless application on the part of more men than have given their toil and thought to any other single line of development.

That success has been attained in so many instances is commendable, but may we not hope for the same success with less waste of time and energy by spending a proper amount of time studying principles before studying their applications?

Can we not bring the man to the same plane of development ten years earlier by requiring the boy to spend four years in a technical school?

You will notice that the writer says "will" supply railroads with men. That it has supplied some already many of you can attest, but as you look over the vast army of workers you will discover that back at the beginning of things, in the shops, in the offices, in the field, the sensible technical graduate has started.

No longer can it be advisedly said that the technical graduate expects to step out of school into the president's chair. They are beginning at the bottom, as you began, and now they have started right their progress will be more rapid, but their labors will be no lighter than yours have been.

The measure of success which they will attain will depend upon the same factors which have made men successful always—hard work, good habits, good health.

I predict the success of the technical graduate. The demand at present far exceeds the supply. Many important roads, looking to their future needs, are giving this subject thought and attention.

The sons of railway men are being sent to the school, which shows the thought of the father. There is no escape from the belief that the railways of the near future will owe much to the technical graduate, and it will certainly be within reason to predict that within twenty-five years many of the successful American railways will be maintained, operated, and managed by the successful graduate of our American technical school's.

Let me add but a few more words and I am done, although with the feeling that much remains unsaid.

There should continue to grow a feeling of sympathy and interest between the

technical school and the railroads; their interests may be mutual in many ways. The school could be much more helpful to the roads if some plan could be arranged by which the roads would lend the school one or more men from their engineering corps for carrying on certain tests in the laboratories of the school and working up the results.

The schools are invariably shorthanded for work in this respect. The work performed by these men would be arranged along such lines of investigation as the road furnishing the men were interested in at the time. To put it another way, the schools would lend their laboratories to the roads.

In connection with our dynamometer car tests and inspections, it would be only a step to aid the railroad employees by arranging a series of talks on shop, fuel, injectors, steam, etc., supplemented by "book lists" for young mechanics, to be given in the car at various points along the line.

Desirable as it may be, and although the cost of a technical education is low, there are many that can not afford time to obtain it. The vast army of workers are compelled to commence work before even completing the high school. This country needs more technical high schools; more schools that will fit for life's work rather than for a profession. This need is felt and is being slowly filled. Do not lose any opportunity of aiding in the introduction of manual training into your public schools. This advice is evidently superfluous in St. Louis where so much has been done in this direction. The influence of the technical school is working back along the line of the preparatory schools, and makes the place of the trades school and manual training in the lower schools more and more evident.

The twentieth century is before us. We are advancing into light from all directions; the mysteries of the past are becoming the familiarities of the present. If there is encouragement in any one thing above all others it is this, that the individual, the private corporation, the people, are finding out that it pays to be honest, to deal squarely with facts, and with fellows. "The solution of the labor problem is to be aided most," says the Commissioner of Labor, "by honest, fair, and just dealings, as between employer and employee." If there is anything that will teach the necessity of honesty, it is the work of the student of the technical school—true fits, true sizes, true drawings, true tests, true reports—a deviation from truth anywhere means disaster. If there is any place or position requiring honesty and truth it is in the service of the American railway.

I earnestly hope that the success of the past may be augmented in the future, and that the interests of the American technical school may be in part at least the interests of the American railroad.

In the discussion following this paper, Prof. C. W. Woodward, of St. Louis, Mo., said:

I enjoyed the spirit and hearty appreciation with which Professor Breckenridge entered into his subject and his grasp of the subject. Of course, a great many things occurred to me as he was reading it, and no doubt many of them must have occurred to you. I am strictly in harmony with him; my position in regard to the relation of technical schools to the railroads, and to every industrial order, is just exactly the same as his. The chart (see page 315) which shows in such a striking manner the wonderful development of steam power in this country, might very well be used to indicate the interest of people in technical education. If you go back, say to 1825 or 1830—if you go back even not so many years ago as that—if you go back to 1840 and 1850, you will find that there was but one school of engineering in this country, and that was the Rensselaer Polytechnic, at Troy, N. Y. Then came the School of Mines, in New York City; it was called the School of Mines, because it was taken for granted that they had to have a school to teach the art of mining. Well, that school of mining still exists, but mining is the least factor in the school. Its departments of architecture and civil engineering have altogether outrun its mining department. And then, all over the country, as Professor Breckenridge states, people have begun to learn and study the world as it is to-day, and study the activities of to-day—to study the great principles of

science and methods and mechanics, which underlie all of our industrial order. They have learned, as he said, to study the living things rather than the dead, as the first step in education. After we have built our splendid foundation, and come in touch with the world of to-day, getting a grasp of the dynamic situation that exists in this country, then we are masters of the work, and culture and fine arts will grow and thrive on the foundation of this practical work. I have no hesitation and no fears about the future of this country as regards literature and art; you are laying down the splendid foundation upon which literature and art are to be built. We must have the strength, and we must have a good education. We must have brain and hands cultivated together, and then the culture and the education will come just as sure as the sun will rise.

There was one thing that struck me in this paper of Professor Breckenridge's that would have surprised me had I not known it just as well as he does, and I think it surprised you, and that is the very small amount of time (Professor Breckenridge said 63 days in a four-year course) that is given, for instance, to the element of shop work in an engineering school, and similarly in manual training schools, which are school's of a lower grade—the very small amount of time; but yet, how much importance attaches to it.

As workmen measure time, 63 days represent 630 hours. And yet they learn so much. Well, how is it? It is simply because they spend all their time learning; all the time that they are in the shop their minds are on their work and their hands are on their work; there is no growth and there is no progress made—you will all bear me out in this—when the hands are employed and the mind is far away—miles away. Then there is no progress being made in any schoolroom, or in any shop or anywhere else, and in an organization of learning, or school, when the mind is absent and the hands present—when the boys' minds are on the baseballor football field, or somewhere else—then he might as well be at home or sitting outside on the porch as to be in any shop or recitation room or lecture room. The boy in a shop of the technical school wastes no time in the shop; he never gets tired of trying to do a thing right. He does not reach the stage of drudgery; he learns more sometimes in one or two hours than an ordinary workman learns in a month, and that is strictly true. Now, my boys go out into the world, and they are called upon occasionally—there are two or three of them right here—they are asked, "What can you do?" "Well, put me to work and see what I can do." They are not engineers; they are simply boys who did shop work before they went to college, in a secondary school; yet they will go to work, and by-and-bye people come around and say, "Where did you learn your trade?" "I never learned a trade." "Oh, go away; tell me where you learned your trade." Well, they will say that they got it there at the University of Illinois, or at Chicago, or at the St. Louis Manual Training School—got it somewhere. "How much time did you give to it?" And he tells them how much time he gave to it, and they think it is nonsense. They know that the boy is fooling them; they say, "You couldn't learn what you have learned in the time you have spent in the shop. I spent several years learning my trade." The other day a man came to me and said: "Professor, you think you can teach your boys anything in the shop by keeping them there only two hours a day. You can't do a thing at it: the only way to learn is by putting them to work from 7 o'clock in the morning until 6 at night. Let them stand there and work; you have to go through all that before they have an intelligent idea of the work." Now, I don't believe that I do. I don't believe that you think so, gentlemen.

Other things have occurred to me this afternoon and interested me very much. It is you, gentlemen, that are going to send the boys along. You are not only the men who have charge of these things and give directions to the affairs, but you are men who have boys to educate, and it is those boys that I am interested in, and that Professor Breckenridge is interested in, and I know you are interested in. Let them come along, that they may follow in your footsteps with advantages, perhaps, which you did not have, but which the world to-day offers them.

EDUCATION IN RAILWAY ENGINEERING AT THE UNIVERSITY OF ILLINOIS.

[By Edward C. Schmidt, instructor in railway mechanical engineering, University of Illinois, Champaign.]

The importance of the railroad interests of the country makes it a matter of wonderment that hitherto so little attention has been given to the education of

men for railway work. Until quite recently it has been impossible to obtain, except in some of the allied subjects in civil engineering, any instruction in those matters pertaining particularly to railroads.

Since their beginnings the technical schools have given instruction in those subjects which relate to almost all other branches of industry and manufacture, and we find (for years back) courses in architecture, civil, electrical, mechanical, mining, hydraulic, and municipal and sanitary engineering, and in chemical technology offered in all our colleges of engineering, civil and mechanical engineering being specialized in many cases to cover various fields of industry.

The railroads, however, have not received until recently their share of attention, which is the more remarkable since railroad work, on account of its complexity and intensity, might be expected to require, more than any other profession, men of the most thorough technical training.

Nowhere, certainly, is there keener competition, nowhere more strenuous activity, and in no other profession are men called upon to bear greater responsibilities or to exhibit greater efficiency. It seems fitting, then, that for this work they should have the most complete equipment. The railroads themselves have hitherto met this necessity by educating their own men, usually at a wasteful expenditure of time, which must occur when education is undertaken by an organization not primarily adapted to that purpose.

The need is fortunately now recognized, and within the last few years several of our universities have established courses in railway civil engineering and in those branches of chemistry and economics relating to this work.

The Western universities—Purdue University being the pioneer—were the first to establish such courses, and the University of Illinois was one of the first to offer this work. As early as 1899 courses in civil engineering were there offered and work in railway mechanical engineering has been given for the last four years, during which time this work has grown to such an extent as to make necessary a department of railway mechanical engineering. An outline of the courses of study in these two departments is given below, where the attempt will be made to give an idea of the scope of the work, avoiding details as much as may be.

The requirements for admission into any of the engineer courses at the University of Illinois are given in the list on page 308.

Each candidate must obtain 36 credits, 1 credit being given for the amount of work ordinarily accomplished in one of the three terms of a high-school course. One credit therefore represents the work of 60 recitation periods of forty minutes each. There are required for admission 29 credits in the studies of the prescribed list and 7 credits in any of the subjects of the elective list. This applies only to candidates for a degree.

For the first two years the subjects prescribed in both the railway civil engineering and railway mechanical engineering courses are practically the same, as is shown in the following list:

COURSE IN CIVIL ENGINEERING.

First year.

Advanced algebra.
Trigonometry.
Analytical geometry.
Elements of drafting.
Descriptive geometry.
Shop practice.

(Wood shop—foundry and forge shop.)
French or German.
English.
Military training.
Physical training.

Second year.

Differential calculus.	Railway curves.
Integral calculus.	Physics.
Land surveying.	Rhetoric.
Topographical surveying.	Military training.
Transit surveying and leveling.	

COURSE IN RAILWAY MECHANICAL ENGINEERING.

First year.

Advanced algebra.	(Wood shop—foundry and forge shop.)
Trigonometry.	French or German.
Analytical geometry.	English.
Elements of drafting.	Military training.
Descriptive geometry.	Physical training.
Shop practice.	

Second year.

Differential calculus.	Physics.
Integral calculus.	Rhetoric.
Machine design.	Military training.
Machine-shop practice.	

These subjects constitute the usual training in mathematics and science necessary for an engineering course, while as much time as possible is given to those studies which are considered solely cultural. Nothing more need be said of the amount of work done in each of these subjects than that it is the same as that ordinarily done in all our colleges and universities.

It will be noted that the only differences in the courses for these two years are in the subjects of machine design and topographical drawing and in shop practice and surveying.

The work of these two years is intended merely as a preparation for the more technical work that follows, and it is only during the latter half of the course that the work is specialized. During the last two years the student in civil engineering or in railway mechanical engineering is engaged in advanced theoretical work and in the applications of the results of his previous study in laboratory and field practice. From this time on the courses are necessarily divergent and must be treated separately.

The equipment in the civil engineering department comprises the usual instruments—compasses, transits, levels, plane tables, sextants, chronometers, and barometers, and for lecture-room purposes a large collection of bridge parts, column sections, lithographs, blueprints of standard drawings, and photographs, which is being constantly increased.

The course in civil engineering for the third and fourth years is as follows:

CIVIL ENGINEERING COURSE.

Third year.

- | | |
|-----------------------------|---------------------------------|
| 1. Analytical mechanics. | 6. Steam boilers. |
| 2. Resistance of materials. | 7. Graphical statics and roofs. |
| 3. Hydraulics. | 8. Descriptive astronomy. |
| 4. Chemistry. | 9. Railway engineering. |
| 5. Steam engines. | |

Fourth year.

- | | |
|---|---|
| 10. Bridge analysis and bridge details. | 17. Engineering contracts and specifications. |
| 11. Bridge design. | 18. Sewerage. |
| 12. Masonry construction. | 19. Tunneling. |
| 13. Water-supply engineering. | 20. Railway structures. |
| 14. Practical astronomy. | 21. Thesis. |
| 15. Geodesy. | |
| 16. Economics. | |

Post-graduate work.

Location and construction of railways.
Maintenance of railway tracks and structures.
Yards and terminals.
Motive power and rolling stock.
Signal engineering.
Railway operation and management.

Railroad engineering, No. 9 in the above list, includes a course in field practice and mapping, in which the students are required to make preliminary and location surveys of a line of railroad of sufficient length to secure familiarity with the methods of actual practice, and for which each one makes a complete set of maps, profiles, calculations, and estimates. Students also take up the study of the economic theory of railway location and railway construction and maintenance.

Courses Nos. 10 and 11—bridge analysis and design—include instruction in computing stresses by analytical and graphical methods, designs, and estimates, and a study of the types and details of design. During this work each student is required to completely design a bridge, proportion its details, and prepare complete drawings.

Course No. 20—railroad structures—is a course of instruction, by lectures, reading, and design in the current practice of leading railroads and an examination of their existing structures and standard drawings. The nature of the other subjects is, it is believed, clearly enough indicated by their names.

The courses for post-graduate work are offered to those who have completed the four years' course or to students with an equivalent preparation from any other college.

The above course of instruction, leading to the degree of bachelor of science in civil engineering, constitutes the preparation given to those who wish to fit themselves for those branches of railway engineering relating to location, construction, maintenance of way, and operation.

For those whose work will cause them to deal with the problems of railroad engineering pertaining to motive power, machinery, and rolling stock, there is obviously needed a preparation very different from that just outlined.

It is the recognition of this necessity which led to the establishment, in the spring of 1899, of a separate department of railway mechanical engineering. This has developed from the railway work of the mechanical engineering department during the past four years. In 1895 the mechanical engineering department undertook, for the first time, locomotive road tests, and since then this work has grown until now there are, on the railroads entering Champaign and Urbana, five locomotives fitted up for road testing.

Two years ago the Peoria and Eastern Railway, of the Cleveland, Cincinnati, Chicago and St. Louis Railway system, built for the university a dynamometer car. This car has been equipped by the university and is jointly owned and operated by the railway mechanical engineering department and the Peoria and Eastern Railway. It has been provided with apparatus for measuring draw-bar pull, apparatus for track inspection, for locomotive road tests, and stationary steam-plant tests, and is used exclusively for this work.

A lengthy description of the dynamometer car would be out of place here, the more so since many members of the society are already familiar with its details; yet it may be well to recall that the drawbar pull is received in a cylinder, from which it is transmitted by oil to gauges in the car above, where records are taken automatically and simultaneously of the train resistance and train speed.

The apparatus for use in the ordinary engine tests consists of the gauges for boiler, steam chest, and air pressure, speed gauge, revolution counters, water meter, etc. A description of the track inspection apparatus which has been recently

installed will soon be published, so that it is sufficient to say here that it also makes automatically a record of deviations from gauge and from level of each rail, of super-elevation of rail on curves, and of time and the location of mileposts. This is accomplished by transmitting, by means of oil, the motions of an independent pair of wheels under the car to small cylinders in the car. The pistons in these small cylinders follow the motions of the wheel below, and their piston rods carry the pens by which the record is made on a moving chart.

A second railway test car is now being built by the Illinois Central Railroad at its Burnside shops in Chicago. This car will also be equipped by the railway mechanical engineering department of the university for the same purposes as those of the dynamometer car described above.

The new car is longer than the one now in use, being 45 feet in length. The dynamometer cylinder will be of greater capacity and the car framework stronger to permit of its being used behind the heavy locomotives now in service on the Illinois Central Railroad. No pains will be spared to have this car as thoroughly fitted out and as well adapted to its uses as is possible. Work on it is now being hurried, and it is expected that it will be in operation within the next three months.

With this equipment and that of its mechanical laboratory the University of Illinois offers opportunities for experimental work along these lines that at present are unequaled elsewhere.

The studies for the last two years of the railway mechanical engineering course are as follows:

RAILWAY MECHANICAL ENGINEERING COURSE.

Third year.

1. Analytical mechanics.
2. Resistance of materials.
3. Hydraulics.
4. Steam engines.
5. Steam boilers.
6. Mechanism.
7. Chemistry, general principles and methods. Calorimetry; analysis of fuels, gases, iron, steel, lubricating oils, boiler waters.
8. Electrical engineering; dynamos—electric machinery and laboratory practice.
9. Surveying, use of chain and compass for finding areas; transits for distance and areas; level for profiles and contours.

Fourth year.

10. Thermodynamics.
 11. Mechanics of machinery.
 12. Locomotive engines.
 13. Locomotive engine design.
 14. Advanced design.
 15. Shop systems.
 16. Compressed air in railway service.
 17. Railway estimates.
 18. Seminary.
 19. Thesis.
 20. Locomotive road tests.
 21. Dynamometer car tests.
- No. 12, locomotive engines, is a course of study of the various types of locomotives, their adaptations and limitations, and of the constructive features and the relations between size of cylinders, drivers, boiler capacity, speed, etc.
- In Nos. 13 and 14, locomotive engine design and advanced design, a special study is made of the proportions of standard locomotives, and drawings are made of engine details—cylinders, boilers, valves, and valve gears.
- No. 16, compressed air in railway service, includes the study in detail of the construction and operation of the air brake, its inspection, and laboratory brake tests, and also the various applications of compressed air in machine-shop practice.
- No. 17, railway estimates, is a study of the cost of materials and repairs, of

forms of specifications for supplies, and of costs of operation in American and foreign practice.

Nos. 20 and 21, locomotive road tests and dynamometer car tests, constitute the experimental work of the last year. This work includes:

Locomotive economy and efficiency tests.

Determination of train resistance on level, on grades, and on curves.

Determination of hauling capacity of locomotives.

Establishment of tonnage ratings.

Experimental determination of track conditions.

Tests of pumping plants and power plants.

Such is the course of railway mechanical engineering which leads to the degree of bachelor of science in railway engineering.

In addition to the foregoing, the department of economics offers to the students in railway work a course in railway problems which is intended to deal with the social and economic aspects of railways in their relation to the transportation interest of the country.

The course begins with a history of railroad construction in Europe and the United States, in which special emphasis is laid on the progress of consolidation and the development of State control and regulation of railways. Special attention is given to the work of the Interstate Commerce Commission in this country, and the principles which have been developed as a result of its decision concerning rates and discriminations. The course presents also the plan of administration and management of a typical railway in the United States, and discusses briefly the question of private versus governmental ownership and management of railroads at home and abroad.

The kindly cooperation of the railroads mentioned above has aided much in the growth of this work in railway engineering, and with the assurance of their continued interest and the exceptional facilities now possessed railway work at the University of Illinois must continue to develop rapidly.



CHAPTER VIII.

FROM FUNDAMENTAL TO ACCESSORY IN THE DEVELOPMENT OF THE NERVOUS SYSTEM AND OF MOVEMENTS.¹

There are two tendencies in education method which have ever been in more or less opposition. One is based upon some theory of internal order of development in the mentality of the pupil; the other upon the logical division of the subject studied. For example, in learning to read the logical order shows sentences to be made up of words, words of syllables, and syllables of letters. Now, as letters are the ultimate logical units, they might seem to be also the ultimate pedagogical units and the place of beginning for the pupil. But experience has shown that children learn to read far more easily by beginning with words or even sentences. Thus the pedagogical order is almost the reverse of logical order.

Educational reformers have attempted to bring into clearer light a subjective order in the development of mentality, but there is no general basis in positive science for such an order. It would seem natural that the modern biological sciences, especially neurology and experimental psychology, should make contributions to this problem.

It is the purpose of this study to bring together scattered facts in these sciences that bear directly or indirectly on the problem.

SUGGESTIONS FROM THE DEVELOPMENT OF THE NERVOUS SYSTEM.

It is but natural, in the early attempts to find a relation between the various structures of the nervous system and the different degrees of mentality observable in individuals, that attention should have first been turned upon the grosser forms of brain anatomy. Large differences of brain in weight are shown to depend chiefly upon variations in the amount of nonnervous material—the supporting tissues, blood vessels, fluids, and the fatty protecting sheaths incasing nerve fibers. Recent investigation has been gravitating toward a solution in the finer microscopical structures of nervous tissue. While as yet the interpretation of facts in this field is more or less doubtful, nevertheless certain features are suggestive to psychology and education.

Growth of the brain in weight.—Vierordt from records of 415 males and females, ranging to 25 years of age, finds that maturity in weight is practically complete at about the eighth or ninth year. The period of most rapid increase after birth, according to this investigation, is from birth to 4 years of age. Mies places the average weight of brains of new-born males at 340 grams and of females at 330. At maturity he calculates the average as 1,400 grams for males and 1,050 grams for females. The period of most rapid growth is that of the first nine months of life, during which one-third of the whole increase after birth is added. The second third of the whole increase is added between the ninth month and the twenty-seventh month. The remaining third is slowly obtained. Mies says maturity of weight is reached sometime between twenty and thirty years. Pfister, in a study of 156 brains from birth to the fourteenth year, confirms in a general way the rate

¹Digest of article by Frederic Burk in the Pedagogical Seminary.

of growth as found by Mies, and his figures would indicate that the maximum weight is practically reached in the puberal years.

GROWTH IN THE CELL BODY AND ITS PROCESSES.

The process of division by which new cells are created ceases in the embryonic period, as commonly stated, by the fifth month of fetal life. The nervous matter at any age shows what seems to be stages in growth of cell body, and along with the developed cells are to be found small cells, which neurologists have generally considered an undeveloped form awaiting structure or function, education or impulse, or whatever else the inciting cause may be, to call them into active service. Kaiser took similar sections of the cervical region spinal cord in a new-born child, a boy of 15 years, and an adult. The number of developed cells in the new-born child was 104,270; in the youth, 211,800; and in the adult, 221,200. The number of cells which came into function during the first years of life was therefore double the number at birth.¹

There is much indirect evidence for the conclusion that the cell bodies are increasing in size, though doubtless by such small increments as to elude observation by the methods employed, throughout the greater portion of adult life. Ramon y Cajal has attempted to establish the principle that the size of a cell depends upon the number of its processes and collateral branches—that is, upon the number of other cells with which it is associated. Donaldson in his résumé of fatigue says: "In childhood the amount of stored material is small, large in maturity, and small again in old age." Hence the cells would by reason of this fact have the greatest capabilities for work in the middle period. Between childhood and old age there is, however, this difference, that while in the former the nonavailable substances in the cell are developing, not yet having matured, those in the latter may become incapable of reconstruction.

Growth of finer microscopic fibers.—It is a speculation to which neurological theories point that the fibers which connect different parts of the cortex, one with the other, are most likely to be concerned in some way with association and the higher forms of neuroses. While this class of studies, dealing with the growth of the finer microscopical nervous structures in later life, is not as numerous represented as could be desired, yet the results seem sufficient to establish the fact that the finer nervous structures continue to grow until a late period of life; and, further, that there is some definite order in their progressive development.

The order of functional maturity.—The conclusion has now passed into general acceptance that when a nerve fiber acquires its fatty sheath, or becomes medullated as is said, it is then functionally mature. No nervous function is ascribed to the sheath. It serves the same purpose, it is believed, that rubber covering serves for electric wires—it prevents wasteful radiation of the nerve current.

The significance of medullation, once established, becomes a key of great value in determining the order in which the various parts of the nervous system develop. Studies in this direction have been pursued most notably by Flechsig of Leipzig.

Flechsig found that the class of nerve fibers first to take on their medullary sheaths are those connecting neighboring centers in the cord and those concerned in receiving and discharging simple reflex reactions. This medullation process begins in the latter half of the fifth fetal month. The simple reflex mechanism is the earliest in biologic development of the nervous system and, as shown, is the first to mature in the development of the individual. Voluntary movements regulated by the cortex are the most recent in racial development, and the pyramidal tracts which convey these impulses are the last of the spinal columns to

¹ Ueber das Gehirngewicht neugeborner Kinder. Wiener Klin. Wochensh, 1889, p. 34.
Das Hirngewicht in Kindesalter, Archiv. f. Kinderheilkunde, 1897, pp. 164-192.
Die Funktionen der Ganglienzellen des Halsmark, 1891.

reach maturity. We have here, therefore, the illustration of the principle that in the development of human nervous functions the first mechanisms to mature are those which are fundamental and racially the oldest, and that the order of development proceeds from these to those which are of more recent evolution.

Flechsig's most recent studies have attempted, by the same neurological method, to trace the order of development of the various bundles of fibers in the brain proper.

The first of the special sense centers in the cortex to mature, according to Flechsig, is that of smell, which, according to Endinger's studies, is the first sense center to be evolved in the biologic scale, appearing as low as reptiles. The last to mature is that of hearing. The process of medullation of the fibers leading to and from the sense centers takes place rapidly, and by the end of the first month of human life all of them show some evidences of maturity.

Dr. Ross, in his *Diseases of the Nervous System*, was, perhaps, the first to attempt a distinction in the nervous system between structures which in function antedate the human form of the organism and those which have been added during the period of human evolution. He says: "The portions of the nervous system which man possesses in common with lower animals, and which are well developed in the human embryo of nine months, I shall call the fundamental part, and the portions which have been superadded in the course of evolution, which differentiate the nervous system of man from that of the highest of the lower animals, and which are either absent in the human embryo or exist only in an embryonic condition, I shall call the accessory part of the nervous system." Dr. Ross points out that the main movements which distinguish man from the lower animals are those which he has acquired since he adopted the erect posture—the varied movements of the hand in prehension and tool using, which developed after the hand ceased to be merely a foot; the movements of articulatory organs concerned in speech, and movements of facial expression. Dr. Ross, by this suggestive juxtaposition of fundamental and accessory physical parts in the human organism with the fundamental and accessory mental powers of man, has opened a field of inquiry rich in suggestion for psychology and education.

From the evidences of late growth of fibers shown by Kaes and Vulpinus, and of cell bodies by Hamarberg, there is justice in assuming that these processes continue until late in life under regulation by the principle which requires the more general and fundamental structures to develop before the accessory. If this indeed be true, then it is clear that the historic pedagogical contention stated in the preface, that the order of instruction should be regulated by the order of internal development of the mind rather than by the logical order of the subject-matter studied, rests upon a substantial basis.

THE THREE-LEVEL THEORY OF THE NERVOUS SYSTEM.

The conception of the nervous system as an undifferentiated unity, such as pervades the popular notion of mind, is not a view that finds substantiation by modern investigation. The notion that all our actions are dictated from a single center—the brain—is at best but half a truth. Many actions which have every appearance of good sense are regulated entirely within the spinal column; and some from within the walls of the abdomen. The lower orders of animals have no brain ganglia, and the lowest vertebrates no cerebrum. All positive evidences from the sciences of anatomy and physiology, and pathological phenomena as well, go to support the evolutionary view of the nervous system of parts, correlated and closely associated, but nevertheless preserving a degree of relative independence.

It was some thirty years ago that Dr. Hughlings Jackson, the eminent English pathologist, made practical application of the evolutionary theory of the nervous

system to the diagnosis and treatment of epilepsy and mental disease. Such has been the practical success of this application that the so-called Hughlings Jackson three-level theory is now the established basis of English diagnosis.

Jackson conceived the nervous mechanism as composed of three systems arranged in the form of a hierarchy, one upon the other, the higher embracing the lower, yet each preserving for itself some degree of exclusive independence.

According to the hierarchal arrangement of the nervous system the lowest level, as the simplest, oldest, most fixed and nonplastic, contains mechanisms for the simple fundamental movements in reflexes and involuntary reactions. The middle level regroups these simple movements by combinations and associations of cortical structures in wider, more complex mechanisms, producing a higher class of movements. The highest level unifies the whole nervous system, and, according to Jackson, is the anatomical basis of mind. "The highest level centers," says he, "are nothing else than the centers of universal and complex representation, or what is the same thing, universal and complete coordinations, or, using old-fashioned language, they are the whole organism."

The three-level theory grew chiefly out of the need of a practical working hypothesis in the diagnosis of mental diseases, and as such it has proved serviceable in pathological practice. In epilepsies due to affections of the lowest level, there are spasms of the reflex movements without necessarily involving higher and more complex coordinations, as, for example, respiratory fits. The middle level epilepsies are of a more complex order, originating in some point of the extreme periphery and extending in directions that are found to agree with adjacency of centers for these movements in the cortex; loss of consciousness is frequently a subsequent, but not necessary accompaniment.

PEDAGOGICAL APPLICATION OF THE LEVEL THEORY.

Pathological practice in the diseases of dissolution, or "devolution" of the nervous system now accepts the essential conception of the Jacksonian theory as a successful working hypothesis, recognizing, however, that it is a general scheme rather than a detailed plan of proven facts accurate in detail. Its applications have, however, never yet been made to psychology and pedagogy. Education deals with the normal evolution of the nervous system. It therefore, in a sense, takes a complementary view to that of nervous pathology. The introduction of the Jacksonian view of the nervous system may prove as serviceable to education as a working hypothesis, as it has in pathology. In crude outline we must recognize in this hierarchal scheme of the nervous system the analogy of its phylogenetic development. In the lower invertebrates we find, not a centralized nervous system with a cerebral or even spinal central station, but a loose system of local ganglia regulating, in more or less independent manner, special movements of the animal. In higher orders chain ganglia appear with a growing approach to centralization. In vertebrates we find the chain system transformed into the spinal system, and within the cranium are ganglia of the special sense organs, developing in complexity and centralization as we go up the scale. Flechsig's highest association centers, presiding over higher reason, if we accept them, extend as a tapering tongue far down the mammalian scale.

From the order of development in maturity of the fiber bundles of the spinal cord and brain, it is conclusive that each bundle has its special period of immaturity, of plastic growth, and finally fixed maturity when modification is difficult or impossible. This middle nascent period is the period for education. "We know," says Clouston, "that each center has its own nascent or growth period, which is sometimes very short, as it must be in the center in which movements of sucking are coordinated; and sometimes very long, as in those in which we coor-

dinate the movements of the hand, from its first feeble grasp up to its consummate achievements in making and shaping."

On the side of external movement we see corresponding phenomena in development. The cord reflexes appear and perfect themselves, largely in early infancy, it is true, but nevertheless they continue to develop until a comparatively late period. Facts may warrant us in concluding that certain general periods may be characterized by predominance of nascencies in a given level. Thus it certainly may be said that in infancy the nascencies of the lower level outnumber those of the middle and higher; that in childhood up to puberty the sense-center nascencies predominate, though lower level processes continue to appear and a fair number of highest level nascencies occur; and that finally in the adolescent period, highest level growths predominate.

There are many facts which go to support this tripartite progress of nascencies, in a loose sense. Insanity, for example, is rare in children under 15 years, and Mercier explains this fact on the ground that children under the puberal age do not yet possess mature higher centers. Insanity under modern interpretation is an affection of the centers of the highest level. According to Boutteville, the proportion of insane children to insane adults is as follows: From 5 to 9 years, 0.9 per cent; 10 to 14, 3.5 per cent; 15 to 19, 20 per cent. Winslow finds only 8 children under 10 years of age among 21,333 insane patients. But with the beginning of puberty there is developed a variety of psychic phenomena which, while only temporary, are none the less to be classified as within the borderland of insanity—irritability of temper—i. e., lack of inhibitive control by the highest centers, morbid notions ranging into hallucinations, etc. Insanity in children, when it occurs, according to Ireland, is generally an after-effect of certain diseases, tubercular meningitis and fevers, which, we can readily understand, tear down the tissues of the highest centers. The gradations of epileptic diseases indicate a growth by periods. In an unconscious but nevertheless clearly established way, three periods have for practical purposes always been distinctly insisted upon by the popular mind. Infancy has been recognized as a period for learning to creep, to walk, to maintain the equilibrium, and to use hand, arms, and legs in the countless movements that later become reflex. Childhood, by ancient and familiar dogma, is the period for training the sense centers. No period, however, has been so clearly recognized as that of the nascency of the highest system in adolescence. It is a common statement that it is not till a child is 13 or 14 years of age, the puberal period, that it is capable of rational thought and reason. The school has always insisted upon this, giving memory topics in the earlier years and reserving the rational study, requiring higher correlation, for the later period.

In all religions, civilized and savage, there are religious rites, perhaps dependent in origin changes, which are clearly conceived as psychic, recognizing that the child takes on at this time the adult's logical thought. The confirmation services in our established churches are evidences about us, and in evangelical churches there is a prejudice against accepting a religious judgment until after the child is 13 or 14 years. On the other hand, this is the period the child himself chooses to make them. It is more than a merely plausible hypothesis that if the structure governing a given nervous reaction in an activity is carried forward by evolution from a lower to a higher organism, the reaction itself of this transmitted structure must also tend to be reproduced, preserving amid accessory human types of reasoning the vestigial tendencies of earlier racial habits. And it is more than merely plausible, from all we know of the structure and processes of the nervous system, that the accessory or highest human types of action and thought only reach this highest stage by passing through, in infancy and childhood, the lower level types of this process. The central conception is that the higher processes are formed by combination of elements and structures of a lower process

already existing. Children frequently persist in following some strange, useless, or even savage interest quite foreign to our civilization. Upon this doctrine of development by levels these strange and useless experiences nevertheless may be essential as a platform out of which a higher coordination, useful for modern life, may be reached. The intermediate stage or level may be useless or even inimical to our civilization, but yet as a link in evolution be none the less essential.

FROM FUNDAMENTAL TO ACCESSORY IN MOVEMENT.

Muscular movement is the complement of nervous activity. If there has been an evolution from fundamental to accessory forms of structure in the nervous system, we must expect to find a similar evolution in the character of movements. Facts answer fully these requirements of theory. The movements which are regulated predominantly by the accessory structures of the nervous system show certain characteristics distinctly differing from those regulated by the fundamental parts of the nervous system. An illustration of accessory movements in the sense of those which are not possessed by animals lower than man is offered by the complex capabilities of the human hand. To bring out the characteristics of the accessory hand movements, as distinguished from the fundamental movements, we may compare them either with fundamental movements of the human body, e. g., the trunk movements, or with fore-limb movements of the lower animals. The movements of the trunk are limited chiefly to leanings, some slight ability to rotate, and to the respiratory function. "With each step that we take toward the periphery, the number of movements that can be executed and the amount of difference between these movements increases, until at length, when the periphery is reached, the number and variety of movements become enormous. The area over which the hand can be moved is almost as large as that of a sphere whose radius is the length of the arm, and the hand can reach three-fourths of the points between the shoulder and the area thus marked out." The most significant distinction to which Mercier draws attention is that in the association of two or more movements the distinctive tendency of central muscles is to make them simultaneous or alternating, while the accessory muscles are distinctively capable of long and complex sequence. Consider, for example, the habit of sequence which is developed in the fingers of the pianist. The central movements are crude in any work requiring precision and delicate coordination. The central movements enter as associates into these coordinations by providing steadiness, but the finer movements are performed by the periphery. The peripheral movements bear to the central the relation of the special to the general. We can not use our fingers in writing till by the central movements the arm is brought into position and held steadily. We can not speak without the general movements of breathing which force the air through the larynx. The peripheral movements, aided by their power of acting successively and with greater complexity, perform special feats.

The marvelous adaptability of the hand can only be explained on the ground that the higher levels of the nervous system combine the lower level movements into the countless new complexes and introduce the features of sequence, precision, etc., which for the fundamental levels are practically impossible.

General paralysis that begins in the highest centers is accompanied in slighter attacks with almost imperceptible interference with precision; the patient is not able to execute the finer delicate movements. As the disease spreads downward, these more general, more complex, more precise movements are lost, layer by layer, as it were, from accessory to fundamental, from peripheral to central, from highest to lowest level, from the products of latest evolution to those of the older. Such devolution may be illustrated in the early loss of writing power without appreciable loss of fundamental movements of the hand; by the early loss of speech

without loss of eating or swallowing movements of the throat, nor any paralysis of the tongue and lips. In downward progress of disease—in devolution, so to speak—the loss of higher level centers results in loss of peripheral or accessory movements, frequently leaving the fundamental movements quite unimpaired.

Progress in evolution of hand movements in the biologic scale has been from extreme fewness in number to infinite variety, from simplicity to complexity, from clumsy inaccuracy to precision, from simultaneous associations to those which constitute long series in sequence, from the general to the specialized. It is evident that the slight differences in bony or muscular structure are far inadequate to explain the enormous differences between accessory and fundamental. The jaws, teeth, tongue, and palate of lower vertebrates are not so radically distinguishable from those of men to account for the rapidity, complexity, marvelous precision, accurate co-ordination, and successiveness involved in human speech. Yet a civilized man uses a score of thousand words or more, each requiring a special and appropriate set of movements, different from all others; and, moreover, he throws these together in sentences requiring successive coordinations of long sequence with marvelous precision and rapidity. When we attempt to measure the gap between man and the lower animals in terms of power of movement, the wonder is no less great than when we use terms of mentality. We are forced back again for an explanation of this complexity of adjustment to the nervous system, and to conclude that the difference in associational capability between the accessory and fundamental levels must be significant.

RELATION OF ACCESSORY HAND MOVEMENTS TO HUMAN INTELLIGENCE.

The intimate relationships existing between higher intelligence and the more highly developed accessory motility of the human hand has been so striking that it has been noted even so far back as Anaxagoras. The extreme theory has been put forth by many modern writers that human intelligence, as such, has arisen in direct consequence of man's assuming the upright position. The fore limbs, thus relieved of the duties of locomotion, which in lower animals is more or less their exclusive function, have found vent for their energy in manifold new employments, and thus introduced the human race to a varied world of richer experience. Intelligence has been the product.

There is much in psychology that supports the general theory. Stricker contends that in every mental act of the imagination there is a tendency to muscular movement, which in many persons rises above the threshold of consciousness.

Darwin, Duchenne, Pidrit, and Mantegazza have studied the significance of the expressive movements, especially of the face and hands, and in general conclude that these are weakened forms of movements that were once directed to some practical end.

Let us trace speculatively, by way of illustration, the evolution of the nerve processes concerned in a state of moral courage. Our brute-man ancestors did not think courage—they acted it. The kinaesthetic memories of previous similar acts flowed directly into the motor channels of muscular reaction without the complex association of the higher levels. Since consciousness is a concomitant only of sensory processes and not of motor discharges, according to the psychological view now generally accepted, consciousness was of brief duration because the discharge was immediate. Later, however, a portion of the kinaesthetic energy, instead of being wholly discharged into motor channels to excite muscular movement, forced itself upward into higher levels and gradually formed long circuits of sensory irradiation among the structures which are the concomitants of higher ideation. By this irradiation consciousness was prolonged and the energy given to muscular action lessened. The individual deliberated longer and acted less. The kinaesthetic impulses that discharged into the motor channels of our ances-

tors, creating in them deeds of physical courage, discharge, in the lower complex nervous system of their civilized posterity, into the higher levels and excite this moral courage of thought.

For support of this standpoint, theory would require that distinctly lower grades of intelligence should be accompanied by deficiency in manual motility.

The feeble-minded show marked deficiencies in power of movement, and, in general, are wanting in just those movements which especially distinguish the human species from lower animals.

"In the will movements," says Johnson, "the difference between the control of the fundamental and accessory muscles was much more marked in the feeble-minded than in normal children. This was more noticeable the greater the degree of idiocy. Some who could execute gross movements with regularity and control were wholly deficient in the execution of finer movements." Johnson concludes that "the fundamental precedes the accessory in development of motor ability. It is important to note that all the spontaneous movements were fundamental. Hardly a single one of them could be considered accessory. They were the swaying of the trunk, the movement of the jaw, swinging of the arm, reeling of the head, and the simplest finger movement."

Says Ireland:

The best and earliest sign of idiocy is the deficiency of the grasp. The hand is flapped or vibrated about instead of being employed to seize or obtain an object. Imbeciles are clumsy in the use of the hands, *and it is difficult to teach them any exercise of handicraft requiring method and dexterity.* Even imbeciles are generally very inept at such exercises as catching a ball or aiming at anything, *and it is difficult to teach them greater dexterity.*

Another series of hand defects of significance is that of the lateral movement of the fingers. This power is partially regulated by the depth of the space between the fingers, a greater depth allowing greater freedom of lateral movements. In the gorilla, for example, the interdigital membrane is large, and reaches far up between the fingers, binding their action. Hartman has found this same feature noticeable in many of the lower human races, notably the negro. In some species of monkeys the fingers are united. Imbeciles frequently show what seems an atavistic tendency in this direction. In persons of normal intelligence, says Féré, the thumb, for example, can be brought to make an angle of 120° to 130° with the index, but in degenerates it is frequently not more than 45° ; the same ratio holds with the other finger angles. Johnson found, by examination, a very general difficulty among feeble-minded children to open and close the fingers laterally; some could open the hand between the index and middle finger, but not between others. Some who could open fingers laterally could not open the first finger alone. In attempting these movements false movements were often made; for instance, swinging of wrist, partly closing hand, or shaking whole forearm. These latter substitutions illustrate the weakness of the control of the higher over the lower centers.

As a rule, in school children, those of quick movement of muscles are considered brighter, mentally, than those of slower movement. In a study which was made to trace the rate of school progress of some two hundred children it was found that 62 per cent of the most rapid pupils possessed strikingly quick control of the movements, while only 8 per cent of this class were slow of movement; on the other hand, among the pupils of slow progress 40 per cent were strikingly halting in their movements, and only 25 per cent possessed a ready control. Also, in the matter of precision, 54 per cent of the rapid pupils possessed accuracy of writing movements against 11 per cent who were not; while among the mentally slowest 59 per cent lacked accuracy of movement and 22 per cent of them were not precise.

The facts which have been reviewed bring out clearly the close and seemingly

organic relationship existing between these nervous structures controlling the movements which constitute man's superiority over lower animals, and those nervous structures which function human mentality. The mentally defective are commonly deficient in the ability to control these accessory movements and show many similarities to Simian traits of structure and movement. Such facts necessarily push us toward the conclusion that defects of mentality, as in power of movement, are commonly due to the failure of higher levels of the nervous system to become functional. It is an interesting corroboration of this view that in the other class of highly specialized accessory movements, as speech, idiots show a very common deficiency. Dr. Down, from an examination of 200 idiots, 7 to 36 years of age, found 33 mute, 16 semimute, 83 with indistinctness, 4 stammering, and 62 with fair speech. It is manifestly incorrect to treat idiots as a single class having common cause of defect. It is with the congenital class that this inquiry is specially concerned, for under this classification fall those unfortunates that date their defect to prenatal life.

Dr. Down contributed a classification of congenital idiots according to ethnic types—negroids, Malays, Indians, Mongols. He asserts that more than 10 per cent of the congenital feeble-minded children are typical Mongols.

They present characteristics so marked that when members of this type are placed in proximity it is difficult not to believe that they are brothers or sisters. In fact, their resemblance is infinitely greater than to members of their own family.

The simple educational and psychological significance of the facts of this chapter is that the individual, from conception to senescence, follows the order of development of the race, and that any serious mishaps upon the way cause an arrest of development of his nervous system at some partial level. But the facts, except in these extreme cases of arrest, are far from fatalistic in their influences. Even among the idiot class, the results of education upon the principle of developing the more fundamental in order to develop the accessory have approached the marvelous. Seguin began the education of the idiot by training of the hand movements, and of these he selected for the first lessons those which were most fundamental—grasping, supporting, letting go, throwing, catching, and leading up gradually by some admirable teaching tact to the accessory, and correlation of eye and hand in natural exercises that called forth the pupil's interest. Strangely, after two years' education on this plan, the general mentality of the boy whom he describes had also improved to a degree that was marvelous even to teachers. The stimulation of the evolutionary levels, in their natural order, through the hand training had strengthened them also for discharge of mental functions.

EVOLUTION OF HAND MOVEMENTS IN THE DEVELOPMENT OF THE NORMAL CHILD.

Some of the movements of new-born infants are extremely simple, and a large number seem to be built up by coordination of these simple movements. But, on the other hand, there are, throughout infancy and early childhood, a number of singular movements which, at their first appearance, are highly complex; they are excited by special stimuli; many of them by irregular modification become adapted to ends for which evidently they were not originally employed. If infants first learned to make all the simple reflexes, and, this step performed, then proceeded to combine these elements into new unities, and so on, we would have a logical order to retrace. But there are few evidences either in infancy or in later childhood of such steps from the logically simple to the complex. Preyer has shown that in the care of the eyes, each eye tends to a certain extent to be a law unto itself, that the two do not move in perfect coordinated unison until several months have passed; yet the same principle will not apply to the movements of the two arms. This pair of bilateral members tend to move simultaneously, when an adult would use one of them independently.

A striking example of this class is offered by Dr. Robinson in experiments upon the ability of new-born infants to hold themselves suspended by grasping a finger or a bar. If we accept the current theory that the immediate ancestry of man lived in trees as many species of monkeys now do, this movement, though highly complex, involving the combination and coordination of several muscles of the arm, wrist, and fingers, is, in an evolutionary sense, fundamental. Robinson has kept records of experiments upon sixty infants, carried out within an hour after birth in the case of at least one-half of them. The infant subject was allowed to grasp a horizontal bar, or a finger, and left suspended in this way, sustaining its own weight. He says that in every case, with only two exceptions, the child was able to hold on for at least 10 seconds; in 12 cases, with infants under 1 hour old, half a minute passed before the grasp relaxed, and in 3 or 4 nearly a minute. When about 4 days old I found the strength had increased, and that nearly all, when tried at this age, could sustain their weight for half a minute. At about a fortnight or three weeks after birth the faculty appeared to have attained its maximum. The feat of hanging from a stick or finger by the hands, logically would imply the prior development of the arm, shoulder, wrist, and finger movements. But such are not the facts. The child grasps a stick and hangs suspended by his arms long before he is able to pick up any object, or put his two hands together, or lift hand to mouth. Logically, the grasp of the whole hand would follow the grasp by the parts, but observation shows us that a certain kind of complex grasp is one of the earliest movements, developed long before some of the very simplest finger movements. Any logical explanation fails at this point. Evolutionary explanation is plausible, for so far as the positive evidence of observation goes the more fundamental and older racial movements appear before the newer and less fundamental, regardless of the order of complexity, except in so far as the accessory as a rule tends to be more complex than the fundamental.

By what process is the transition to the adult form of grasp accomplished? Undoubtedly imitation is the final directing cause, but there is a functional difficulty in the retarded development of the infant's thumb. He is born with a monkey thumb and must first obtain a human thumb and be able to use it in perfect opposition. Preyer, Mumford, and Mrs. Winfred S. Hall have given detailed descriptions of the development of the thumb. For the first two or three months of life the thumb is really a nuisance to the child and is continually in the way. Generally it is curled inside of the grasp. In the case of Mrs. Hall's child it was not till the eleventh week that the thumb was brought outside the hand when the latter was clenched.

Mumford concludes that it is often six months before the development of thumb makes the elaborate movements of the human grasp possible. While the thumb of the hand is thus gradually gaining in motility and strength in a human direction, the great toe is losing motility and strength, also in a human direction.

Several other hand movements could be more or less definitely traced, commencing in the infant with complex reflexes, inexplicable as yet upon any theory except that of evolutionary origin, and developing into human forms by modifications and additions that show no trace of logical arrangement.

Nor do all these complex but original coordinations appear immediately at birth. They are scattered along through infancy by distinct parts observed in the growth of the nervous system. The teasing and bullying instincts of children offer suggestive illustration. Among the commonest movements in these activities may be observed pursuing, throwing missiles, striking, throwing down, holding down, dancing about conquered victim, laughing, clapping hands, pulling hair, pulling ears, etc. Children's natural games are largely made up of mild forms of these elements, the more malevolent tendencies having been eliminated.

These complex movements are ultimate units; they do not conform to the pur-

poses of civilized human conduct and are not explicable nor reducible by any process of logical explanation. Corresponding to them are psychic states of equal complexity which find no explanation in the civilized child's present environment. There is a principle well known in physiology and embryology, that a structure or a movement—useful for a certain purpose in a certain stage of the biological scale—loses this purpose in a higher stage and through modification becomes used for some entirely different purpose. Now what are the applications of this view to many of these strange complexes that appear in early childhood, even to such seemingly evil forms as those which appear in cruelty, bullying, and teasing? May it not be, indeed, that they constitute a level in the evolutionary hierarchy, and, though in themselves useless, are nevertheless an essential platform from which the coordinations of a higher and useful level are formed? It seems plausible that the child needs to live to some extent the life of his ancestors in order actually to develop in his own nervous system the kinæsthetic sensations which by the process of higher evolution may serve as the basis for higher forms of activity in the highest levels. It becomes indeed a question of extreme nicety to determine just the exact moment when sufficient actual experience has fully established the racial tendency and the time for inhibition and radiation of the force into higher cerebral associations should follow. Danger of arrest of development at the lower stage is as important as that the fundamental impressions should not be made. Such a view gives these curious phenomena a natural place in child life, and emphasizes the probability that children's plays and games, as mild vaccination forms, serve as mediations between brutal ancestral tendencies in the nervous system and the higher levels employed in altruistic modern life, between savage racial action and civilized ideation.

COORDINATION OF SIMPLE MOVEMENTS.

One who watches a young infant will notice a number of jerky movements continually occurring in practically all the muscles of the body. Some are merely slight twitchings of fingers and small muscles, and they range in scope to those of flinging hand, forearm, or whole arm about vigorously. The legs are moved in the same way. In the same class we must place the play of features, turnings of the eye, and various other awkward movements.

Slow rhythmical movements of flexion and extension of the fingers occur, which, instead of possessing the quick, incisive character of voluntary movements, partake of the sluggish rhythm so familiar to the visitors to the tanks of an aquarium. They often occur in a series of three at a time during a quarter of a minute. Then follows a pause, during which there is apparently an accumulation of energy in the nerve cells.

Notwithstanding the evident fact that these movements possess strength and energy, the new-born infant is unable to direct his hand or arm movements. He can not for some days, or even weeks, bring his hand to his mouth. Accidentally in these movements the hand frequently is thrown to the mouth, and the infant sucks his finger. He is unable to remove the thumb from his mouth and must wait till some adult or lucky accident of movement removes it for him. Without purpose and without manifest external stimulus the elbow, wrist, and finger joints are continually being flexed. Even months before birth these purposeless movements had commenced. What is the significance? As Flechsig has shown, in earliest infancy practically the whole cerebral cortex is scarcely connected by mature fibers with the centers of action in the spinal cord, medulla, and pons. It is not till well into the first month that these earliest connections are made on the sensory side; and the motor connections by which activity is cerebrally directed do not appear until after the sensory has developed. The child is several months

old before all portions of the sensory bundles of fibers which pass from the cord to the cortex show maturity in every part.

These movements are most common in the earliest weeks of infancy, and tend gradually to disappear. The fact that the connections of the lower centers with the cortex are not made till late leaves us to conclude that these early movements are the products of spinal activity, uncontrolled as yet by the higher levels. They are lowest-level movements in their simplicity, unmodified by the inhibitions of later human experience which lie undeveloped in the higher strata of the nervous system. They must represent the movements which are racially the oldest entering as elements into human activity. If lower animal movements do appear in human activity, it is in this period we most safely can look for them in their most undifferentiated form. Later in infancy the first connections with the cortex are established. Then sensory fibers go upward, and later motor fibers go downward from these middle centers to inhibit and control the lower movements in certain particulars. Association of cell with cell, center with center, develop to modify and make more precise or offer greater alterations in these modifications. Later a still higher system of control is superposed upon this. From this point of view the purposeless movements of infants are more intelligible. They are movements without higher inhibition, movements as yet without halter or rein. The objective evidence bears out this supposition. Gradually this flopping of arm, rhythmic flexions and extensions, and nervous twitchings tend to disappear. Just in proportion to the capability of an infant to execute voluntary movements of a given limb or organ these vagrant movements disappear.

In the light of this consideration, the importance of these rhythmic movements, be they survivals of aquatic and arboreal life or not, is manifest. If through any disorder the lower levels are unable to produce them and the infant lies quiet and motionless, these sensations necessary for willed action never occur, the physical concomitants of mentality are never stored, and the infant lives to become an idiot. These movements, the flotsam and the jetsam of spinal activity uncontrolled as yet by higher centers, are the ultimate units. If we admit that they are survival movements we have here an illustration of a widespread physiological principle, that new uses are grafted upon old structures.

The modifications of the ultimates, whether complex or comparatively simple, with which the infant begins life, proceeds in several directions: (1) the breaking up of old bilateral and simultaneous tendencies, characteristic of central movements; (2) the growth of independent movements of smaller parts that previously only moved in conjunction with larger wholes; (3) the coordination of various series to form long and complex sequences, as we finally find them illustrated by writing, sewing, piano playing, etc.; (4) the development of precision and accuracy; and finally, (5) the response of different movements to a great variety of different stimuli. These modifications perhaps represent the chief accessory lines of development that distinguish human movements as such.

In the development of coordination from lowest to highest, the power of evolutionary habit decreases and the possibility for special modification increases; there is a progress in teachableness or at least the term education must be taken in two different senses. In the lower strata of development, where the steps have been worn by racial experience, education that is most serviceable will be that which takes its cue from the racial stimuli and concerns itself with leading coordination to take these fixed steps as truly as possible. But later, as the higher strata are reached, when the movement emerges from this deep-worn gorge that ancestry had trodden and comes to the point where racial paths are divergent and indistinct, the definition of education changes. Education has now a wider sweep of vision, and instead of following paths, may sight a distant goal and lead more directly to it. In a different terminology we might call this early education which is restricted to aiding the child to follow in the steps of his ancestors "fun-

damental," and that which finds its place later, that which comes in when racial paths grow shallow and divergent and originality more possible, we might call "accessory" education. Taking wider range in this thought we may consider the child as the sum of his movements. We must remember, nevertheless, the principle of development by parts, by which some parts reach maturity at later periods than others, so that we can never say, in an exact sense, that the child is now in the "fundamental" period of education and then in the "accessory." But in a crude, inexact way, it is certainly true that more lines of accessory education are possible in adolescence than in childhood, more in childhood than in infancy. Using the word "teachable" in the accessory sense, we may say that the child is far more teachable than the infant.

The child traverses, before he is 6 or 7 years old, not only the long deep worn road of racial ancestry, reaching back perhaps as far as arboreal or even aquatic life, but I think we may say he takes a few paces in certain few coordinations that are his own, blazes a few trees, and leaves his mark. As we shall later see, by 6 years of age he shows evidences in many lines of being far upon the highway of distinctively human capabilities of movement. His fingers and hand that once tended to act only upon the lower simultaneous principle, now can move in fair degree by the principles of independence and of succession. In the delicate steadiness of central movements and the complex coordinations requiring delicate peripheral movements, he has probably acquired half of the ability he ever will acquire. His nervous system has made a prodigious growth, far outstripping any other system. The coordinations which have made this possible are the products of this growth.

DEVELOPMENT OF HAND MOVEMENTS DURING SCHOOL AGE.

The following is a brief review of the few studies which have been made upon children of school ages by psycho-physical methods, to determine the rapidity, accuracy, strength, maturity, and fluctuating periods in the development of hand movements.

Rapidity of movement.—Dr. Bryan, in Worcester, and Dr. Gilbert, at Yale, have experimented upon the degree of rapidity with which children of different ages were able to tap an electric key which automatically recorded results. Bryan thus tested four sets of arm muscles—shoulder, elbow, wrist, and metacarpophalangeal finger joints. In order to secure the free separation of these sets of muscles, the arm of the subject was clamped by means of certain devices to allow movement only of the specific set of muscles. The test in all cases was the greatest possible number of taps the subject could execute in five seconds. The number of children (public schools of Worcester) used in the results here referred to is 729. They ranged in age from 5 to 16 years.

The following tables for boys and girls give the arithmetical mean of the tests (right arm) of all boys and of all girls of a given age:

TABLE A.

Boys.

	Age.											
	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.
Number.....	14	26	35	33	43	37	36	33	34	41	32	26
Finger.....	19.6	19.5	21	23.1	24.4	25.2	27	29.3	28.7	31.5	31.6	33.9
Wrist.....	20.1	23	23.7	26.3	27.8	28.5	30.3	31.6	32.3	33	34.2	35.9
Elbow.....	22.7	23.5	24.2	26.1	28.2	28.1	29.3	29.9	31	32.7	31.5	32.7
Shoulder.....	18.4	19.8	20.5	22.3	24.1	22.6	24.1	25	25.5	27.2	26.3	28.7

TABLE A—Continued.

Girls.

	Age.										
	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.
Number	28	32	33	43	37	36	33	34	41	32	26
Finger	19.8	20.7	22.2	24	25.8	27.1	28.2	30.3	29.5	29.1	31.3
Wrist	21.6	23.1	24.3	25.5	28.5	30.4	31.6	33.2	30.3	30.9	33.3
Elbow	22.7	23.2	24.4	25.4	27.5	28.6	29.4	30.5	28.8	29.3	30.1
Shoulder	19.9	20.2	21.9	22.7	22.6	24.9	25.7	27.5	26.6	26	27.9

Dr. Gilbert has made two studies upon rapidity of tapping, one upon New Haven children and one upon Iowa children. In his tests the elbow was held free from the table and the arm was in no way clamped. The subject tapped with the finger, but the movement must be interpreted largely as that of a wrist movement. The number of children was approximately 50 for each sex and each age—from 6 to 17 years of age. The number of taps in five seconds for both sexes is shown by the following table:

TABLE B.

	Age.													
	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.
New Haven boys	21	22.8	24.9	25.8	27.7	29.7	30.3	29.8	31.2	31.3	33	35	---	---
Iowa boys	22.1	23.3	25.8	27.1	28.3	28.1	30.1	31.1	32.4	34	34	34.4	36	36.7
New Haven girls	19.7	21.2	23.9	25	26.9	27.8	29.6	28.1	29.8	31.8	31.8	31.5	---	---
Iowa girls	22.3	24.2	26	26.7	26.2	28	29.3	29.5	29.4	31.3	33.2	33.8	34.3	35.3

Without holding Drs. Bryan and Gilbert responsible for the form of all conclusions, there may be drawn from their studies the following inferences:

I. The rapidity of motor ability of the hand and arm, as indicated by tapping, increases on the whole with age, and does not reach maturity until the adolescent period.

The immaturity of this movement at the age of entering school is shown by the following table of percentages, assuming the rate of tapping at 16 years as 100 per cent:

TABLE C.

	Per cent of 16-year ability possessed at 6 years of age.		Percent of 16-year ability acquired between 6 and 16 years.	
	Boys.	Girls.	Boys.	Girls.
BRYAN.				
Finger	57	63	43	37
Wrist	64	65	36	35
Elbow	72	75	28	25
Shoulder	69	71	31	29
GILBERT.				
Hand (New Haven)	64	62	36	38
Hand (Iowa)	65	69	35	31

II. Girls mature earlier than boys in rapidity of hand and arm movements. This is manifest by a glance at the tables. As shown in Table C, the girls in all but one test (New Haven) have at 6 years reached a larger percentage of their 16-year ability than the boys. At 13 years girls have reached practical maturity, and the rate in some of the tests actually decreases after that age. Bryan's girls

at 13 years have acquired 97 per cent in the finger test, 99 per cent in the wrist test, 101 per cent in the elbow test, and 98.2 per cent in the shoulder test.

III. The rate of improvement in rapidity is not regular from year to year, but proceeds by very marked fluctuations or rhythmic vibrations. Both Bryan's and Gilbert's tables agree in showing four periods of acceleration and four periods of retardation in rate between the years 6 and 17, though there is slight divergence for specific years.

The years of highest rate for boys are as follows:

	Years.			
	8 and 9	11	14	16
Worcester.....	8	10 and 11	14	16
New Haven.....	8	12	14 and 15	16
Iowa.....	8			16

The years of lowest rate are as follows:

	Years.		
Worcester.....	10	13	15
New Haven.....	9	13	15
Iowa.....	11	13	16

IV. Rapidity of movements of hand and arm in tapping tends to be greatest when the rate of growth in height and weight is least, and vice versa.

V. The more central (fundamental) movements tend to mature earlier than the less central (less fundamental) movements.

In Table D the relative immaturity of the finger movements is clearly shown. At 6 years the finger has acquired, in both girls and boys, a distinctly smaller percentage of its ability at 13 years of age than any of the others, and the wrist movement is less developed than elbow and shoulder. It has been shown that growth in power proceeds by rhythms, and it becomes interesting to know in quantitative form the relative amounts of development that are added within each of these rhythms of advancing age. Table D is constructed with a view of showing this. Each retardation, with its succeeding acceleration, is considered a period. There are thus, in the case of boys, four periods, 6 to 9, 9 to 12, 12 to 14, 14 to 16; in the case of girls, three periods, 6 to 10, 10 to 13, and 13 to 16. The tapping ability at 16 years is taken as 100 per cent, and the figures in the column indicate the percentage of this 16-year ability added in each of these respective rhythms.

TABLE D.

Boys' right arm.

	Up to 6 years.	6 to 9.	9 to 12.	12 to 14.	14 to 16.	Total at 16.
Finger.....	53	14	14	7	7	100
Wrist.....	64	13	11	4	8	100
Elbow.....	72	14	5	9	0	100
Shoulder.....	69	15	7	4	5	100

Girls' right arm.

	Up to 6 years.	6 to 10.	10 to 13.	13 to 16.	Total at 16.
Finger.....	63	20	14	3	100
Wrist.....	65	21	14	0	100
Elbow.....	75	15	10	0	100
Shoulder.....	71	10	18	1	100

These tables show, (1) that in both boys and girls alike the elbow and shoulder movements have reached a larger per cent of their mature power than the finger and wrist movements; (2) that the finger movement acquires a large per cent of its ability after 9 or 10 years of age—28 per cent in the boys and 17.5 per cent in the girls.

Development of strength.—Peron early in this century showed by experiments with the dynamometer that Malays and the natives of New Holland are distinctly inferior in strength of the hand and arm to French marines. That the civilized races are distinctly superior in hand and arm strength to the lower races of man has many times since been confirmed by Manouvrier and others. Féré goes further and contends that among individuals of the same race the more intelligent have the greater strength of hand. He says that the same dynamometer test, taken upon individuals belonging to different classes of society, has shown that the pressure produced by the effort of flexing the fingers is less with workmen whose profession is exclusively manual than with those whose work requires less muscular force, but whose intelligence comes more in play; and further, that the muscular power is still greater with those of the liberal profession of the same age.

TABLE E.

Age.	Annual increase in kilograms.							
	Porter hand squeeze.		Gilbert wrist lift.		Roberts arm lift.		Gilbert arm lift.	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
6½ to 7½	1.6	1.4	1.7	1	-----	-----	8.4	6.8
7½ 8½	1.7	1.6	.8	1	-----	-----	9.5	4.1
8½ 9½	2	1.1	1.1	.0	-----	1	7.2	6.5
9½ 10½	1.5	1.2	1.7	1.5	-----	.1	9.6	- 1.3
10½ 11½	1.5	1.4	.5	.5	-----	2.3	9.5	7.7
11½ 12½	2.3	1.7	1.7	1.1	1	1.2	7.7	6.3
12½ 13½	2.4	2.7	1	1.9	5.7	3.5	8.6	11.3
13½ 14½	3.2	1.9	1.1	.6	2.8	3.2	12.8	6.4
14½ 15½	4.4	2	4.6	1.2	6	4.1	23	5.4
15½ 16½	4.4	1.8	3.3	.6	9.6	2.2	8.3	- 3.2
16½ 17½	-----	.1	3.3	.4	6.4	2.1	20	2.8
17½ 18½	-----	-----	.0	1.2	2.2	5	13.6	1.4
18½ 19½	-----	-----	1.7	.0	1.5	1.9	.0	3.8

It is clear from the table that strength varies from year to year in rhythms, as we have observed in all other tests. In order to determine the relative proportions of increase that occur in different periods I have calculated the following tables. The strength at 16 years has been taken as a base or 100 per cent. By subtracting, the other columns are obtained.

TABLE F.

	Per cent of 16-year strength acquired—			
	By 6 years.	By 11 years.	Between 6 and 11 years.	Between 11 and 16 years.
<i>Boys.</i>				
Squeeze (Porter)	20	46	27	54
Wrist (Gilbert)	21	46	26	54
Arm (Gilbert)	24	64	22	44
Arm (Roberts)	-----	-----	-----	36
<i>Girls.</i>				
Squeeze (Porter)	23	54	31	46
Wrist (Gilbert)	32	65	32	36
Arm (Gilbert)	32	67	23	45

From these calculations it would appear that in the case of boys only about a fifth of their 16-year-old strength is acquired before 6 years, a quarter from 6 to 11, and over one-half from 11 to 16, during the puberal changes. In the case of the test upon the whole arm maturity is somewhat in advance. In the case of girls a greater share is acquired before 6 years. Their strength acquirement is more rapid than with boys from 6 to 11 years, although the largest increment is added also during the puberal flux.

In so far as the lift of the entire arm may perhaps be more exclusively fundamental than the combined movements of the wrist and hand alone, we see from the table that the arm movement seems to mature earlier than the wrist and hand.

Precision of hand movements.—Superficial investigation shows that the nervous mechanism involved in the attempts to be precise with the finger, require first an adjustment of a larger area of muscular and nervous tissues than those of any other movement of the body probably. Precision in drawing a fine line accurately, for example, requires steadiness not only of the finger movement itself, but of the hand, the whole arm, and even of the body. If we observe a child learning to write we find that he holds his breath, and in many cases his legs will be found bracing his body in intense strain. The central muscles of the arm and trunk are called into activity to give support of steadiness as a necessary condition for the fine adjustment to follow. We may, therefore, perhaps consider precision as involving two processes: (1) That of steadiness of the central organization as a platform upon which rests (2) the finer nervous adjustments of the most complex nervous elements.

1. *Central steadiness.*—This phase of the problem has been subjected to investigation by Hancock in the effort of children to stand still. The subject was asked to stand with feet close together and hands at side, to keep his attention on a distant object, and to try to remain still for a minute. By means of the ataxiograph attached to a cap worn on the head, the bodily swayings of the subject are automatically registered upon smoked paper. The test was made upon 168 boys and girls of Worcester, 5 to 7 years of age. His tests show that during these two years the girls gained in steadiness 32 or 33 per cent of the power of control at 5 years, and the boys gained about 15 or 16 per cent. We may say, therefore, as the indication of Hancock's study, that power of control increases with age (very rapidly at the ages 5 to 7), and more rapidly in girls than in boys.

Curtis in a study of inhibition tested the ability of children of various ages in their ability to sit absolutely still. He concludes: "The ordinary child can not sit still voluntarily. Children under 5 years do not on an average sit still more than 30 seconds, and children from 5 to 10 years not more than one minute and one-half. Curtis explains this condition on practically the same ground offered in the paper, viz, that the higher centers of voluntary control are not developed in any degree of maturity until a late period of child life. He finds that mental occupation materially assists in the control of muscular restlessness, and that these higher centers of brain action are not developed until a comparatively late period.

(2) *Peripheral unsteadiness.*—Corresponding to these larger swayings of the central movements there are numerous small vibrations in the peripheral muscles involved in the adjustment for fine movements. In early infancy these movements are more noticeable in the form of apparently nervous twitchings that constantly occur in nearly every muscle of the body, even during sleep. As has been stated, these are perfectly normal and are signs of health; they tend to disappear in conditions of lowered nutrition, and in idiot infants they are very much fewer or wholly absent. As the infant grows older they gradually grow fewer and less noticeable. The fact that they gradually tend to disappear may be explained on

the ground that as the nervous and muscular mechanism is perfected the lower mechanisms pass under control of higher brain levels.

Lindley has made a study of the automatisms of early childhood, and he shows the persistence of many of these earlier, simpler forms into childhood and even into adolescence. Lindley found that automatisms increase very perceptibly with fatigue; that they are most frequent in accessory muscles, and in general decrease with age.

Precision will depend upon the number of sensory impressions and the accuracy of habitual adjustment between them and motor discharges. Clearly, as experimented facts show, exercise (i. e., the frequency with which they are impressed upon the memory) will go far to determine motor precision.

The development in accuracy of kinæsthetic sensations with increasing age has been demonstrated by Gilbert in his Iowa study. The subject was seated before a table upon which were two points 50.8 inches apart. A pencil in his hand was placed at one end of the line. After carefully noting the distance, his eyes were blindfolded and he was asked to move the pencil along the board and place it as near as possible upon the other point. Five trials were allowed each subject. Averages of these estimates from fifty subjects of each sex and for each age from 6 to 19 are as follows (the figures give in centimeters the averages for each age of the estimate of distance, really 50.8 centimeters):

	Age.													
	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.
Boys.....	10.7	31.2	38.1	44.4	46.5	46.7	44.7	46.7	46.5	50.3	51.5	53.1	54.9	57.1
Girls.....	12.7	20.3	29.7	31.8	38.9	46.5	41.1	43.2	48.3	46.7	51.1	51.0	52.1	51.5

The progressive development with age is clearly shown.

(4) *Growth in precision.*—Bryan with a somewhat elaborate mechanism tested precision of finger movement as it occurs in executing the motions of writing. He used in the test some 600 or 700 boys and girls, ranging in age from 6 to 16. He states in conclusion that "the most obvious fact which appears is the great gain which is made between 6 and 8." Almost one-half the gain in precision made from 6 to 16 in both "up" and "down" writing movements, is acquired between 6 and 8 years. A second test to which Dr. Bryan subjected the same children was that of their ability with a stylus to strike a fixed point. An electrical apparatus recorded the approximations of error. The boys' right hand from 6 to 16 years gains in ability 60 per cent; the boys' left hand, 55 per cent; the girls' right hand, 56 per cent; the girls' left hand, 58 per cent. The puberal period seriously interferes with the growth.

In the study, previously quoted, bearing upon characteristics of children who made "rapid," "normal," or "slow" progress in school grades under a system of promotion giving freedom to individuality it is shown that 54 per cent of the rapid pupils, 39 per cent of the normal pupils, and 22 per cent of the slow pupils are strikingly careful and accurate in their writing and drawing exercises, while, on the other hand, 11 per cent of the most rapid, 34 per cent of the normal, and 59 per cent of the slow pupils are strikingly careless and inaccurate. From the evidence of this study accuracy on the whole must be associated with a maturer mental development as indicated by school progress.

In the matter of accuracy it may therefore be concluded: (1) That as a primary condition which makes accuracy of hand and arm possible the child must have a matured degree of control under direction of his higher level centers (i. e., volun-

tary). The fact that this maturity is not reached normally until the ninth or tenth year renders questionable the efforts of the school to compel accuracy such as is required by the kindergarten and also by the primary school in writing, weaving, etc.; (2) that the ability to be accurate in hand and finger movements increases very materially during school ages; (3) that accuracy depends indirectly upon the development of the body as a whole, the steadiness of the trunk muscles being as essential as the accuracy of hand or finger movements themselves; (4) that for purposes of delicate peripheral movements, as shown by ataxographic experiments, etc., the child has not a matured power of control until well into the school period and long after severe school requirements of accuracy are demanded; (5) that the evidence goes to show that the sensory kinæsthetic sensations, essential in psychological theory for definite voluntary movements, are in general in a very immature state until 8 to 10 years; (6) that while the early years of school life are doubtless the period of nascency for finger and hand movements, nevertheless there is evident need of a clear realization of the psychological conditions on the part of teachers, not only intelligently to direct the training of these movements, but also to guard against unhygienic requirements; (7) that there are manifest dependent relations between general mental ability and power of accuracy of hand movements; (8) that steadiness of the trunk or central movements (fundamental) necessarily precedes ability to be accurate in peripheral (or accessory) movements.

In conclusion, some of the more general suggestions of this review may be restated briefly as follows:

1. The brain grows in its finer structures until a late period in life. There has been a failure to substantiate connection of differences in mentality with the differences in gross anatomy of the brain, shape of skull, weight of brain, form of convolutions, etc.

2. The order of development of the independent parts of the physical and nervous system is, as a general principle (subject, doubtless, to minor exceptions), from that which is oldest in racial history toward that which is most recent; that those portions which are oldest are most fixed, determined, and least capable of modifications by present environment, and those which are relatively most recent are most plastic and subject to modification by education and environment.

Among the important pedagogical inferences which follow from this principle the following might be mentioned:

1. That, taking the activities independently, there is an early period in the development of each part or process, when the purpose of education must be to follow the fixed innate hereditary line of tendency, and to allow the racial instincts fullest play of development (fundamental education).

2. That there follows a later period, in an activity's development, when it passes partially out of the fixed control of racial habit and becomes more plastic to present environment (accessory education).

3. That the order of logical connection of subject-matter belongs, educationally, to the period of approximate maturity of an activity's development, and must not be introduced in the earlier instinctive period, in conflict with strong evolutionary tendencies.

4. In an extremely loose sense, clearly recognizing the principle that the organism develops by parts, each of which has a different time of beginning its development, a different rate of ripening, and a different period of reaching maturity, nevertheless we may regard the period of infancy as one of predominating nascencies of the oldest fundamental activities largely in control of the lowest level of the nervous system; the period of childhood from 2 years to puberty as the period of predominating nascencies of the special sense and their association one with the other; the period of adolescence as the period of predomi-

nating nascencies of the highest form of associations; i. e., those which have been developed in the history of the human race.

5. The child's hand at the age of commencing school is relatively immature in power of rapidity of movement, strength, and precision. Roughly, it would seem that at the age of 6 the child has acquired only about 20 to 75 per cent of the power at 16 years of age. It is clear that the period from 6 to 10 years is one of extreme nascency.

6. Deficiencies in the structure of the hand and in freedom of its movements are significantly frequent as accompaniments of deficiency in intelligence. The human hand in early childhood needs opportunity for the fullest possible development, which in general proceeds from fundamental to accessory movements.

CHAPTER IX.

INHIBITION.¹

Inhibition is used in its widest sense, in which it is nearly equivalent to natural selection.

HERBART.

For Herbart the whole story of psychology is the story of the struggle of concepts for the possession of consciousness.

The strong concepts drive out the weak; "but as soon as the hindersome yields, the concept by its own effort will again make its appearance in consciousness." "When a sufficiency of opposition exists among concepts, the latter are in equilibrium." The laws of the movement and equilibrium of concepts can be calculated by mathematics. The first law is: "In the case of two concepts, one never entirely obscures the other." "In case several concepts strive together, the sum of arrest will be equal to the sum of the weaker members." The mechanical threshold is the line which separates the conscious from the unconscious. Those concepts on the mechanical threshold, while "out of consciousness, are still effective therein." "But concepts on the statical threshold are in a state of complete suppression, and can not effect consciousness at all. It may be observed that feelings and desires have not their source in the process or act of conception in general, but always in certain particular concepts. Hence, there may be at the same time many different feelings and desires, and these may either agree or entirely disagree one with the other."

"The basis of the reason is the coincident operation of several complete series of concepts." "Will is effort, accompanied by the idea of the attainability of the object of effort." "Freedom of the will is the assured supremacy of the strongest masses of ideas." Friendly concepts unite into apperception masses and resist the entrance into consciousness of concepts antagonistic to them. Sanity is the equilibrium of concepts.

Herbart's psychology contains three chief ideas; prevailing ideas are the content of consciousness; defeated ideas tend continually to return; the prevailing ideas tend to ally themselves with all friendly ideas as men are united into nations or the aggregate of cells makes up the individual body.

Herbart's empirical psychology describes the actual events of consciousness. We all know how the child forgets the old toy in the new; and how new interests, loves, hopes, and fears are continually driving out their predecessors, and being in turn driven out by those which follow them. It emphasizes above all the economy of a monoideistic state of consciousness. Its interest for us is that it shows a form of intellectual inhibition which is practically equal to the "struggle for existence." It is inhibition by individuals rather than by central control.

BENEKE.

The system of Beneke derives much from Herbart. Every idea leaves a trace behind in the original powers, and when this is again stimulated either from within or without the idea is brought again into consciousness. These traces he

¹ Digest of article by H. S. Curtis.

calls "formed primitive powers." Each faculty is only a summation of all the soul's acts of a particular kind, according to the law that "all products of a like kind attract each other, and as a consequence fuse into a whole." He says: "We give the name of understanding to the totality of concepts existing in the soul; judgments to the totality of judgments; inferential power to the totality of conclusions; will to the totality of all ready formed acts of willing; consequently the totality of feeling is nothing more than the totality of all the feelings that arise in the soul and are permanently existent in it." "The developed human soul is a product of simple original powers and of that which has affected them and been permanently retained by them." "For all our powers of sense, together with the products springing from them, form one intimately connected whole; they are the soul." Beneke has dropped Herbart's transcendental ego and made use of his doctrine of apperception to explain the faculties of the soul and the soul itself.

TAINÉ.

For Taine, as well as Herbart, all mental events are determined by the mutual struggle of ideas, though Taine takes the further step of reducing all ideas to sensations.

All the psychic life can be reduced to sensations. "All that observation detects in the thinking being are, in addition to sensations, images of various kinds, primitive or consecutive, induced with certain tendencies, and modified in their development by the concurrence or antagonism of other simultaneous or contiguous images." "Just as the living body is a polypus of mutually dependent cells, so the active mind is a polypus of mutually dependent sensations and images; and in the one case as in the other unity is nothing more than a harmony and an effect. The ego is a mere abstraction; all that is is the individual sensation, idea, or image which may occupy consciousness at the time. As Condillac has said, 'When I smell a rose, this sensation is all my ego.'"

Sensations may be still further reduced to molecular movements in the brain cells. There is no mental product without molecular movement. There is no molecular movement without some mental result, though this may be subconscious. Molecular movement and sensation are really the same thing, and the reason they do not seem so is because we see them from opposite sides.

The most important point in Taine's system is that the elements of consciousness, sensations and images, if left to follow their inner tendencies, would make a pandemonium of the human mind. It is only through their mutual checks and repressions that sanity results.

ROUX.

Just as Herbart and Taine have sought to account for all psychic phenomena by the struggle of ideas, so Roux has sought to account for all psychic phenomena by the struggle of the parts. Those cells which are most often stimulated to functional activity are over compensated for their waste and are thus victorious in the struggle.

In the struggle of the tissues and organs we have the same process repeated. Roux sums up the results of his theory as follows: "Those cells or cell parts will be established which are in the position to bring on functional adaptation, and this is the result of the struggle of the cells." "On the other hand, the struggle of the different organs and tissues among themselves leads to the greatest possible utilization of the space in the organism, to inner harmony, to the perfection of the physiological significance of the parts to the corresponding morphological significance." "Through this struggle a much more perfect adaptation to ends must be brought about and much quicker than, according to the Darwinian principle, of the selection of formal variations among individuals." This view presupposes the same conditions in the body as exist in the external world, namely,

that there are germs of many more cells in the body than can possibly find place there and a consequent struggle for room, and that the amount of food is always limited, and the high nourishment of some means the low nourishment of others.

In the vegetable world the struggle of the parts seems to be yet more apparent. Each twig and leaf struggles for space and sunlight as best it can. The upper branches overshadow the lower and they dry up and drop off, just as unused members atrophy and disappear from the animal body. Each spring a twig starts from beneath the scar of each old leaf along the branch, but if you look again after a year you will find scarce one in a dozen has survived. Only those that have found or won space and sunlight are left. The length of the leaf stalk and size of the leaf are determined by their relations to the sunlight.

THE VAGUS OR PNEUMOGASTRIC NERVE.

Despite the immense amount of investigation to which the vagus has been subjected of late years, its function is still far from clear in details.

The ordinary phenomena seen in the stimulation of the vagus are that the heart is slowed or stopped after the first or second beat and held thus for a few seconds, when it begins to beat again and beats more strongly than it did before stimulation. Of late, however, the most or all of this secondary augmentation has been referred to sympathetic fibers, bound up in the same sheath with the vagus. The action of the vagus varies greatly at different times. With many investigators you can not tell whether the combined nerve (vagus and sympathetic) or the vagus alone was stimulated.

Our knowledge of the vagus is not satisfactory. That it inhibits the heart seems certain, as its rhythm is accelerated on the section of the vagi and retarded by their stimulation. That it has something to do with the nourishment of the heart seems very probable, inasmuch as the same stimulus will not repress the heart long at a time, and there is often a secondary augmentation. Sending a blood solution through the heart after a salt solution has the same effect. If the vagus is cut and the animal allowed to live, the heart atrophies, although with the vagus intact the animal may be starved to death without this occurring.

Wundt says every sensory stimulus first causes nutrition, and nutrition inhibits activity for a time. There seems to be good evidence also that nerve cells and muscles atrophy without their proper stimuli.

He has sought to reduce nerve phenomena to terms of physics and chemistry, so far as possible. The nerve stimulus is the potent factor in nerve growth, activity, and inhibition of activity. The first effect of every stimulus is the nutrition of the cell. The nerve stimulus is turned into a growth force. By this means it is made latent in the fiber for about one two-hundredth of a second and for a somewhat longer period in the cell.

Wundt's system contains two important principles—that the nerve stimulus is nutritive and inhibitive, and that nerve energy tends to equalize itself by overflow from points of higher to points of lower tension.

THE EFFECT OF THE STRUGGLE OF THE PARTS AS APPLIED TO ACTIVITIES.

The general activities repress one another. The store of energy at the command of the organism is always limited, and the using energy in one way must prevent its use in another.

Dr. Sargent represents the amount of force expended by an average man weighing 150 pounds at 3,400 foot-tons daily. He divides this expenditure among the various activities as follows:

	Foot-tons.
Calorific work.....	2,840
Internal (nervous and vital) work.....	260
External (muscular) work.....	300

If these estimates are correct, then several inferences may be drawn. If we suppose the capacity of the individual for continuous work is 3,400 foot-tons, the requiring of 400 tons in muscular work instead of 300 tons would only leave 3,000 tons for nervous and vital processes. Thus a demand upon any one of these activities beyond what nature is prepared to furnish by an increased nutrition must be drawn from the others.

Just as the heart and brain will starve the rest of the body and still be undiminished themselves, so it seems to be nature's law that active parts shall be fed at the expense of inactive ones, if necessary, or even at the expense of parts active in a lower degree. Sargent says:

Porters, draymen, heavy iron workers, and a certain class of athletes often illustrate the effects of an excessive use of the muscular system. Where the body's nutriment is expended in this direction the impairment of the heart and lung tissue is likely to follow.

When a child is growing very fast he is disinclined to exercise. Reversely, too much exercise will probably check growth. But the effects on the brain are most disastrous of all. Many children set to work at 7 or 8, and worked hard, have grown up very dull. Intellectual workers are usually incapacitated for hard work by severe exercise. It is a common experience of students that if they play three hard sets of tennis in the afternoon they can not work afterwards.

Mosso gives many examples of the effect of physical fatigue on mental ability. He says he has climbed Mount Blanc several times, but he can remember nothing of the view from the summit.

Intense cold produces an intellectual lethargy, complained of by Arctic explorers. There is a tendency to go to sleep.

Spencer says the present race of Englishmen are inferior to their fathers in height, weight, and resistance to disease. He thinks the overwork of the school children is the cause. He says this belief has been thrust upon him by observing the constant physical breakdowns in overpressure schools. For every one that breaks down there must be at least half a dozen injured, he thinks.

There is a great deal more or less experimental evidence to show the influence of brain activity on the various bodily and vital functions.

That growth may be checked is difficult of proof. Still it appears that children grow faster during the summer vacation. On this point European statistics seem to be agreed.

Binet and Henri, after careful study of the boarding schools of France, conclude the weight of the children may be actually diminished by excessive brain work.

Mosso, after speaking of how the other tissues are consumed to supply the heart and brain in death by starvation, and the effect of severe brain work on the strength of the muscles, says:

And therefore I hold it for probable that not only by starving, but also by exhausting the brain by excessive work, the muscles may give up a part of their albuminoids to the blood currents to be carried to the brain. I notice in my own case that I grow lean when I am working hard, and begin to gain flesh with a vacation.

Mosso and Binet both found that a brief period of intellectual activity increased physical strength, but a long period reduced it. Dr. Maggiora tested the strength of the middle finger of his right hand on the ergograph in the morning with 40 contractions, amounting to 3,694 kilogrammeters. At 5.15, after examining 19 candidates, he could only make 11 contractions, amounting to 1,086 kilogrammeters. Mosso says: "The tiring the brain diminishes the strength of the muscle." "The requirement for rest after a period of severe mental work rests in the fact that the nerve centers are depleted and the muscles are weak."

Binet and Henri found that hard mental work began to reduce the rate of respiration after fifteen minutes, and of the heart beat after half an hour. Spencer says this result may become permanent as the result of overwork.

There seems to be a general agreement that dyspepsia may be caused by excessive brain work, and the resistance to disease lowered.

Inasmuch as the function of sleep is mainly brain rest, we may expect the same results from loss of sleep as from excessive brain work.

In experiments carried on in Italy it was found that dogs could be kept without food for twenty days, and lose more than half their original weight, and still survive; but loss of sleep for four or five days proved fatal. If a hibernating animal wakes up too soon it is apt to starve to death, it is said.

In what we have said thus far we have spoken as though the energy for all the activities was drawn from a common reservoir, into which exactly the same amount was poured each day; so that any excess of use in one direction meant a deficiency in some other direction. We have seen that these suppositions agreed fairly well with the facts. Still the case is by no means so simple as this. All activities increase the metabolism so as to compensate for the extra work up to a certain limit or even overcompensate it. Beyer has shown from the measurement of naval cadets that the height may be increased 1 inch and weight 50 to 60 pounds by systematic exercise during the years from 16 to 20. Years in which gymnastics were taken were compared with years in which they were not taken.

In every muscular movement there are three factors involved—the muscle, the nerve, and the nerve cell. It seems to be well established that the nerve itself does not tire, but the muscle or nerve cell may be fatigued. To this fatigue there are two elements—that due to loss of energy, and that due to clogging by waste products. As a rule the nerve cell seems to fatigue first, as a muscle which can no longer be contracted voluntarily still responds for some time to the electrical stimulation. The importance of the nerve cell to physical strength is much underrated in most estimates. If the nerve cell is injured the muscle lies inert and soon atrophies.

It has been shown that students have a stronger hand clasp than laboring men, although they have probably done very little to develop it. It is also well known that the strength varies with various conditions. As has been abundantly shown, any sensory stimulus may greatly augment the knee jerk or the pressure on the dynamometer, if it occurs at the right time. The knee jerk, rapidity of tapping, and power of clasp are all increased by brief intellectual activity. But intellectual fatigue again reduces them below the normal. In a series of experiments which I carried on last year strength seemed to be in a very close relation to mental excitement. Normally I could press from 115 to 120 pounds. But on one occasion, after working for an hour and a half on my thesis and getting very much interested, the average ran up to 127, with 132 as the highest contraction. As similar results were obtained by Binet and Henri, I refer to them instead of treating more of my own results. These facts show the close dependence of physical strength upon brain states.

Those who would explain muscular fatigue by mental work by saying we think with our muscles must take into account the experiment of MacDougal, who found the finger was relaxed during mental effort, and Binet and Henri, who found the muscles of the eye in a similar condition. This theory can not well account for any increase of strength due to mental activity.

There is plenty of direct evidence for discharges from one brain area to another. Stimuli to a single sense stimulate the entire brain. All sensory and motor areas are under voluntary control. This can only mean discharges from the association areas upon the areas concerned. If this were continuous there would be mental exhaustion from muscular work. Perhaps this is the explanation of the mental heaviness of laborers. In case of intense mental work the current may set in the other direction. Motor areas would discharge upon the associational areas and the muscles would be weakened.

More than two-thirds of the entire mass of the brain is made up of the fibers, and of these by far the larger part are associational. This would be meaningless if discharges could not take place over them. Whenever a discharge takes place, there is a transference of force. If one area could not assist another we might expect its degeneration to follow the loss of its appropriate organ. This, however, does not occur except in case of a very young child. The blind do not have visual dreams if they become blind before 5 or 6. If associations become established with other areas the visual seems to be retained.

SUMMARY.

The amount of energy which can be developed by any organism is limited. Up to a certain point exercise causes a muscle to increase in strength; beyond this it is weakened. But this point is only reached when all available supplies are no longer sufficient to repair its waste. Long before this point is reached it begins to draw on the other activities. Active parts are fed at the expense of resting ones.

Excessive physical exercise may stunt growth, reduce the flesh and strength, impair the heart and lungs, and dwarf the intelligence or impair its efficiency for the time being. Where great drains are made on the energy to maintain bodily heat, as in polar regions, maturity is attained later and intelligence is often deficient. By excessive brain work growth may be checked, weight reduced, muscular strength lessened, the heart beat slowed, and dyspepsia and a physical breakdown brought on.

One activity may inhibit another: (1) By poisoning the blood with its waste products; (2) by robbing the blood of its nourishment; (3) by consuming the resting parts; (4) by using its brain area.

The nerve cell is as important as the muscle to muscular strength. Different brain areas are connected by associational fibers. These must imply discharges from one to the other, and hence a transference of energy. If one area could not assist another its degeneration would follow the loss of its appropriate organ. This does not occur unless the loss comes very early in life. The hand can be kept inactive without the hand area's discharging spontaneously. The brain is on the way to unity not yet entirely reached; connections are very poor in the child. "Second breath," or "warming up," means the drafting in of other areas to assist the primary activity. Constant use tends to associate the area used with other areas. Intense effort tends to unify the brain. The brain owes most of its endurance of mental toil to its motor areas. Develop each area and interest in childhood, and use the energy of all in a single activity in manhood.

RESTLESSNESS.

Restlessness is movement without any apparent cause or purpose, resulting seemingly from some inner physiological necessity. Children are very restless, a quality which is shared by the young of all animals as well. It is the root from which the play impulse springs, a surplus of energy requiring employment. As the young animal grows to maturity and requires all his energy to secure his living play disappears; but whenever food is provided and the struggle for existence is made easy a surplus again accumulates and manifests itself in a vague uneasiness.

But anyone who observes children must very soon perceive that they differ greatly in activity from their earliest years. In the hope of securing a more accurate measure of this I secured four American pedometers and put them on adults and children of various ages, and asked some responsible person to keep record of the daily activity for a week. The results were not as satisfactory as might have been hoped, as the pedometers were not very reliable and had to be regulated every week or two to keep them running together. The records given are not really accurate for miles, as the pedometers were all set to a 20-inch step.

This, of course, would be too long for a small child¹ and too short for a man, being an average step for a woman of medium height. This, however, shows the number of steps each person took in a day, or the real activity, which was the thing desired. This means 2,754 steps for every mile represented in the record.

City children out of school (miles).					Country children in school (miles).				
Sex and age.	Satur-day.	Sun-day.	Mon-day.	Aver-age.	Sex and age.	Satur-day.	Sun-day.	Mon-day.	Aver-age.
Male, 6	11½	3½	7½	10½	Male, 11	9½	3½	7½	7½
Male, 2	9½	6½	9½	8½	Male, 13	10½	6½	10½	9½
Male, 1½	6½	6	7½	7½	Male, 9	12½	6½	8	9½
Male, 4	7	8	13½	12½	Male, 16	8	3½	6	7½
Male, 6	10½	7½	14½	10½	Male, 11	11½	7½	7½	10
Male, 4	7	6	8	7½	Male, 16	-----	-----	-----	6
Average ..	8½	6½	10	9½	Average ..	10½	5½	7½	9½

City children in school (miles).					Adults (miles).				
Sex and age.	Satur-day.	Sun-day.	Mon-day.	Aver-age.	Sex and age.	Satur-day.	Sun-day.	Mon-day.	Aver-age.
Female, 14	10½	8½	6½	7½	Female, 34	13½	5½	6½	7½
Male, 10	9½	7½	5½	6½	Female, 36	10	9½	9½	9½
Female, 6	11½	11½	8½	11	Female, 60	14½	2	17	10½
Female, 12	11½	6½	11	8½	Female, 82	10½	7	9½	7½
Male, 15	10½	13	17½	12½	Male, 36	7½	4½	6½	6½
Female, 17	6½	4	5½	6	Female, 34	5½	3½	8½	5½
Female, 10	11	10½	11	10½	Male, 26	15½	12	9	10½
Female, 8	13½	5½	8½	8	Female, 21	11	3½	8	9½
Female, 10	10½	7	7½	7½	Female, 26	5½	5½	6½	6½
Female, 10	12½	8½	9½	9½	Male, 28	2	3½	2½	2½
Female, 13	14	10	13	13½					
2, 15	4½	3½	7½	5½					
Average ..	10½	7½	8½	8½	Average ..	9½	5½	8½	7½

From these tables and curves it will be seen that the averages of children below the school age are largest; it would also appear that country children are more active than city children. But the activity of the country children from whom the records were obtained was considerably above the average. The activity of the girls and boys, men and women, is nearly the same. The adults were engaged in various occupations; the lowest record is my own while teaching in a country school.

The activity is least on Sunday for all, and greatest on Saturday for all but the small children. Wednesday and Thursday seem to be days of low activity also.

SITTING STILL.

The syllabus brought in something over 200 returns, of which the larger part were from one normal school. The first purpose of the syllabus was to determine, if possible, whether the restlessness of children is a real physiological necessity, as is so often stated, or that it is merely the result of inclination.

The first question was as follows:

1. Ask your child, or if you are a teacher ask a few children at a time in your room, to take some easy position and see how long they can sit still without any movement; meanwhile, with watch or clock in sight, note time and put down (a) which part moves first—fingers, feet, head, arms, legs, etc.; (b) what kind of motion, usual or unusual, violent or gentle.

What efforts do you see to prevent these spontaneous movements, as, e. g., tension of all the muscles, clenching mouth, hands, etc.?

¹ The real distance traveled may not be so very different, as children run a great deal and take longer steps at such times.

From the nature of the returns it would be difficult to make a table of just how long each child sat without moving. The differences are very great, but the tests in the returns (so far as the exact time is given) will justify the statement that children under 5 will not, as a rule, sit still more than thirty seconds, though now and then one will sit still as long as ten minutes. Children under 10 will not usually sit still more than one and one-half minutes, and oftentimes less than half a minute, though one or two have sat as long as twenty minutes. These results seem to show that the average child can not sit still in a test for more than a very short time.

Probably one reason children do not sit still longer in a test is because they make so great an effort to sit still. They usually clinch their hands, contract their brows, and set their teeth, as though they were going to lift a thousand pounds instead of merely doing nothing. Their breathing is often irregular and they frequently try to hold their breath. They have the consciousness of being watched also.

All these circumstances tend to make sitting still more difficult, but their influence is probably less than we might suppose at first. There are many children who do not make a great effort to sit still, but they do not succeed much better than the others. In the clinching of the hands and setting the teeth also you have an expression of the child's judgment that sitting still is a hard thing to do. In speaking with adults I find that some of them still remember, with a feeling of pain, the times they were required to sit still as children.

I think that, all things considered, the evidence will justify the conclusion that the ordinary child can not sit still voluntarily.

The answers received in reply to the following question show a much greater restlessness.

Question. Will you compose yourself in a comfortable position sitting, lying, and standing, and remain as still as if you were having a slow photograph, and describe your experience freely?

The results are very different from those obtained from the university students, but the conditions were also very different.

Sensibility is much increased. Many sensations which normally remain below the threshold of consciousness are raised into distinctness, and it is the little itching, pricking, rheumatic sensations which soon make sitting still disagreeable if any one allows himself to notice them. So, also, the motor tendencies of all sensations become apparent. Infinitesimal impulses to move are magnified into strong desires by the attention they receive.

I think it is both true that the child is restless because he is inattentive and inattentive because he is restless. But the latter is primary.

RESTLESSNESS IN SLEEP.

Question. If you have an opportunity to observe children or adults in sleep, notice if they are ever perfectly still for any considerable period, or do their eyelids or lips move, expression of the face change, fingers clinch, etc.?

Out of 97 observations on children and adults under this head, 83 report movements and 14 report none. Most of the observations were for not more than ten minutes, and a larger number might have proved restless on longer observation.

THE RESTLESS CHILD.

Question. Describe one of the most restless children you know—complexion, health, stature, flesh, color of eyes, hair, etc., bright or dull, good or bad natured, regimen, discipline, etc., association gay or sad.

The number of cases was 152. The significant characteristics seem to be as

follows: Good health, 93; poor health, 25; bright, 123; of these, very bright, 71; dull, 10; tall, 41. These characteristics came out in answering the questions of the syllabus. The following also came out preeminently, though only incidentally mentioned. They are apt to be boisterous and rude in their play and often hurt other children without intending to. They are mischievous and disobedient to parental authority. They are often whipped, but do not mind the whipping. They seem very insensitive to pain. The majority of the restless children described are under six years old. Restlessness appears to disappear with mental occupation.

The restless child seems to be an especially instructive type and one that is very little understood. He is the child who makes most of the trouble for his parents and the teacher. He is often thought to be willful and bad and may be made so if he does not receive proper training.

Restlessness as applied to children below the school age may be taken as nearly equivalent to activity. The physical activity of a child at this age is a very fair measure of the energy he develops.

The restless child is, as a rule, a peculiarly good animal, as well as, seen from the characteristics given—boisterous, rude, mischievous, disobedient, talkative, insensitive to pain, fond of teasing, often cruel, destructive, social, often leaders, bright, yet thoughtless.

Restlessness in children up to six or seven years of age seems to be a good sign, but a bad sign afterwards. It does not usually last much later than this in its extreme form. The restless child should naturally develop into a man of action.

THE QUIET CHILD.

Question. Describe in the same way one of the most quiet, inert children you know. Are they lazy, self-conscious, companionable? Do they associate with older children? Are they studious, thoughtful, sad or gay, etc.?

Many observers said they did not know any quiet children. Their characteristics, as compared with the restless children, are as follows:

	Quiet child.	Restless.
Number of cases.....	108	152
Good health (mentioned).....	44	93
Poor health.....	22	25
Bright (all).....	57	123
Very bright.....	14	71
Self-conscious.....	28	.....
Thoughtful.....	45	.....
Studious.....	27	.....

It would appear that the health of the quiet children is not as good, and they are not as bright as the restless children. But of course the numbers are too small for safe conclusions.

Several types of quiet children can be made out—

1. There is the child who seems to lack energy all around. He is inactive mentally and physically. He is the typical dull scholar at school. He can not be educated without unusual stimulation.

2. There is the child who is inactive from sheer rapidity of growth. He grows 5 or 6 inches in a year, and lies around all day.

3. Fat children are nearly always inactive.

4. The large number who are said to have poor health would indicate that loss of energy due to disease is one very important factor.

5. Overwork, mental or physical, produces quietness.

CONDITIONS OF RESTLESSNESS.

In answer to the question, When are children most restless? there were 148 replies.

Out of the 148 returns 2 said children were most restless in the morning, 112 in the evening, 14 on bright days, 107 on cloudy days, 8 in the fall, 110 in the spring; 15 said exercise increased restlessness; 116 said exercise decreased restlessness.

That children, as well as adults, are most restless in spring agrees with general observation. Children certainly are more restless if kept from active exercise, and on bad days. These two cases are often one, but not always. Several teachers from different parts of the country have said that children are more restless on days preceding a storm.

When the class becomes restless the teacher may take it as a sign that the work or method should be changed.

The conditions of restlessness seem to be about the same in adults as in children.

There were 114 cases: Restless, 75; gloomy, 11; fatigue, 7.

Going without exercise, 123 cases: Nervous, 13; stupid, 20; headache, 10; stretch, 47; irritable, 17; yawn, 67; gloomy, 6; restless, 66; sleepy, 18; impulsive movements, 51.

In the case of a change from an active to a sedentary life the resulting restlessness would seem to indicate a certain accumulation of energy for motor uses, which is either used for other purposes later or the rate of metabolism of motor areas shows up to a slower expenditure. In case of going without regular exercise the case is apt to be complicated with overwork and the disturbing of rhythms.

The physical effects seem to be a violent beating of the heart, flushing of the face, increased circulation in the brain, and great irritability of all cerebral cells, which results in a diffuse discharge upon all the muscles and glands, causing tremors, nausea, and various similar phenomena. The individual is very restless and often nervous. The cerebral excitement is too general to be inhibited. A person is thoughtless and impulsive. He tends to speak all his thoughts, is apt to be irritable, and takes offense at the slightest cause. He loses control of his muscles; his hand trembles; it becomes absolutely impossible to sit still; all automatisms become very pronounced; he is unable to sleep at night.

The characteristics of childhood resemble those of a constant state of excitement.

SUMMARY.

The activity of children below 6, as shown by pedometer records, is greater than at any later period. But children differ greatly in activity.

Children under 5 could not sit still longer than 30 seconds in the test. Children under 10 could not sit longer than one and one-half minutes.

Blind children are more restless than other children.

Children are most restless near the close of school, on cloudy days in the spring, when they go without exercise.

Auditory stimuli are perhaps of great assistance in maintaining the activity of the brain. Hearing is inhibited by thought.

PEDAGOGICAL INFERENCES.

From what has been said there may be seen on the one hand a great danger, excessive brain work, and on the other a great need, physical exercise.

The child is still in the animal stage of his existence. The irresistible impulse which has come down from that struggle in ages when life and food depended on fleetness of foot and strength, is still surging within him and drives him on to action. Not only does he refuse to sit still for a half minute at a time, but he

seldom walks when going anywhere, but runs or gambols along like a young animal. Of the children I have questioned as to whether they liked to go to school or not, nearly every one who has said "no" has given as the reason, "because he had to sit still," or "stay indoors," or some other reason which meant restraint of motion.

If childhood is the animal period of life it should be the time for animal (physical) culture. It is then that interest in and love for physical movement is greatest. The greatness of childhood consists in swiftness of foot and strength of body and limb. The school hero is usually the boy who possesses these qualities.

We have seen that excessive brain work may dwarf the stature and weaken the constitution. We know, also, that from 15 to 60 per cent of our children become nearsighted before leaving our schools; that a very large proportion, especially of the girls, have curvature of the spine; that a great many become nervous, and not a few have chorea; that among the girls at least only a very small proportion finish the high school in a state of good physical health. Not all of these evils are due to the school, but at least a part are. To that part for which the school is responsible there are two elements—the one due to overwork and worry and the other to being indoors and enforced inactivity. We have seen how difficult it is for the child to sit still; that it is this which makes school disagreeable to him; that his personal discomfort makes it hard for him to keep his mind on his task; that long restraint tends to make him nervous. However, it seems probable that the lesson of quietness is one which it is necessary for the child to learn. There is no probability of his acquiring the power of deliberation until he has learned to be still. We have conjectured also that the high pressure of motor areas may be instrumental in making their associated connections permeable.

We are suffering from a false ideal of education which has been handed down to us from the Renaissance. We seem to think that to master books is the only way to become learned, and to become learned is the object of education, whereas neither of these propositions are true. One can gain nothing but second-hand information from books, and the object of education is not to make men scholars. The time when a man can become learned from books alone has already passed. We live in an age of science, and observation and experiment are its fundamental methods. Our ideal student is no longer an emaciated consumptive with a wet towel about his brows, bending over his Homer in the small hours of the morning, but rather the well-rounded man of the world; one who knows books, but who knows men and affairs as well; one who has drunk deeply from every experience an honorable life can offer him; one who has ideals of action as well as thought. How absurd in the face of modern culture to teach the child the contents of a few books and think we are educating him! All our cities are becoming cosmopolitan. Almost anything that can be learned from books can be better learned from the observation of the things around us. The city in its parks, museums, libraries, art galleries, theaters, sermons, business, etc., offers a liberal education to everyone whose mind is open to receive it.

The charge of impracticability can always be preferred against book learning. It is less often called up by our everyday experience; its lessons are less easily applied; they are acquired with greater difficulty and more easily forgotten than lessons from observation and experience. It is at least as important that a child be able to observe well as that he be able to master books. Observation is usually of things right about us which will touch our lives the oftenest. The problems which life gives every man to solve can not be solved from books. He must learn to study from nature herself those things on which his success depends. That man is best educated who best knows how to solve his life problems, drawing on every resource everywhere that can help him to that solution. But knowledge in its largest sense is a very small part of a well-rounded education. It is

surely as worthy an aim to admire a beautiful picture or poem as to know how it was constructed; it is as much to love a great good man as to know his biography, and to be able to do a thing is surely greater than to know how it is done.

There are five aims to be gained by a well-rounded education: (1) A good physique; (2) to know what our life requires us to know; (3) to be able to do whatever we need to do; (4) to admire the beautiful; (5) to love the good.

In woods or flowers or animals the child sees companions, and his imagination seeks to fathom the motives of their actions and the pleasure of their lives. Could anything cultivate the heart more than this living world and make it responsive alike to the fancies of the poet and the teachings of religion? Here in this primitive nature love are the roots of the love of the beautiful and the good. The nature lover is always reverent; he believes naturally in the divine. The child's attitude combines the religious and scientific. All true science must be guided by love and reverence.

CHAPTER X.

THE COMMON SCHOOL IN THE SOUTHERN STATES BEYOND THE MISSISSIPPI RIVER, FROM 1830 TO 1860.

By A. D. MAYO, A. M., LL. D.

LOUISIANA.

The present essay deals with the attempt of the State of Louisiana to establish and maintain a system of public instruction, from the year 1840 until the close of the civil war.

Previous to this date, from the year 1803, when the immense territory known as Louisiana came into the possession of the United States Government, the record of the educational history of this people finds itself in contact with an intelligent and active common school public, as this term was then understood. From 1805 to 1808 the Territorial legislature worked at the problem of schooling the few thousand white children and youth by a plan in some way broader and more generous than before had prevailed in the country. It included a central "University of Orleans," with academies in each county, seminaries for young women, and a library in each county. The corporation of the university, besides a number of eminent citizens, consisted of the leading officials of the city and Territory, and it was intrusted with ample power and backed by two lotteries. All authority was vested in this close corporation to establish such educational organizations "as should appear to them most convenient."

In 1806 Governor Claiborne informed the legislature of the lack of success. In 1807 the lottery scheme was dropped. In 1809 the governor pronounced the grand scheme a failure, only one parish having established schools under its authority. Nothing daunted by this collapse of a romantic project, the legislature, in 1811, voted \$39,000, of which \$15,000 was for the central college in New Orleans, and \$2,000 for one or more schools in each county, with three school trustees for each county. By this and subsequent acts a school of the higher grade was kept alive in New Orleans for fifteen years, until 1826, with less than 100 students, largely of the charity order. In that year the State subsidy was transferred to the College of Louisiana, at Jackson, East Feliciana Parish. Despite the lottery, the taxing of the growing population of New Orleans, and other financial devices, the people did not respond, the two public schools subsidiary to the college in the most progressive municipality of New Orleans containing less than 100 poor children.

The numerous changes which this and similar attempts subsequently went through, like the swift turns of the kaleidoscope, are unimportant in a general review of the progress toward a common school. They are deeply interesting as demonstrating the intense desire of the more influential and zealous body of school men to give the children something above the Catholic parochial, private, plantation, and other makeshifts, on which a large portion of the children and youth depended for their only educational outfit in the new American life. The conclu-

sion of the whole matter was that, as late as 1840, not half the white children in thirty or forty parishes of the State were in any school.

One of the hindrances to the success of these preliminary ventures was doubtless the fact that a large portion of the white population of Louisiana were members of the Roman Catholic Church, whose authorities, then as now, in perfect and honest consistency with its ecclesiastical theories, could not approve a school system responsible to any power save the priesthood. This, with the scattered population, the great mixture of peoples, the difficulties of travel, and the obstinate habit of every parish caring for itself, explains the fact that no body of educators, however influential, intelligent, or zealous, could reasonably expect to hold in an organization like the American common school a people in conditions and circumstances so indifferent or hostile to its spirit and methods. Up to that time the national land fund was increasing and money had been liberally spent, both through private and public expenditure; enough, if properly administered, to secure the most favorable results.

But the educational public of the State, nothing discouraged by past failures, rallied and placed in the constitution of 1845 one of the most radical and far-seeing provisions for universal education to be found in any Commonwealth at that period. It provided for a State system of public instruction; free public schools throughout the State, to be "supported by taxation on property and otherwise;" the jealous care of the Government school lands, and the formation of a school fund at 6 per cent interest for the support of the system; the establishment of a State university, composed of four faculties—law, medicine, natural science, and letters. The only seeming neglect was the provision that, after the organization of the university and its endowment by the national land fund, the State should "be under no obligation to contribute to its establishment or support by appropriation."

The public school law, passed in 1847, provided for the schooling of all youth under 21 by a State tax of 1 mill on a dollar, which, with the income of the school fund, was to be distributed to every parish (county) that chose to put itself in contact with the system. It provided that each parish could pass over its own portion of the school lands to the charge of the State. The State superintendent of instruction received the largest salary then paid to that official in the country (\$3,000), with as much additional for clerk hire and incidentals as Horace Mann received annually for all his prodigious work in Massachusetts. The parish school superintendent, elected by a vote of the people, was a salaried officer, at \$300 a year. The district trustees were also elected by popular vote. Mr. Alexander Dimitry was appointed State superintendent of education in 1847, and the new system was launched, like a magnificent river steamer, sailing down the Father of Waters on the crest of a spring overflow that changed the great river to an "inland ocean."

The historians of education in Louisiana date the practical beginning of the new order of public instruction from the change in the schools of New Orleans, between the years 1841 and 1845. The transfer of the College of Orleans, in 1826, to a country parish had left on the ground what was called "the central and primary schools of New Orleans." In the former the academical studies of that period were taught. In each primary school some 50 poor children were instructed gratis. Of all the moneys lavished on the College of Orleans, \$7,000 remained as the capital of the new departure, which a local tax on theaters increased to \$10,000. A general director and twelve "professors" were appointed, and the work again undertaken. The number of beneficiary students was raised, in 1827, to 100 for each of the three schools. In 1828 there were 250 pupils in attendance in all the departments, and \$8,800 had been expended during the past year. In 1831, 245 scholars were reported, and the system was steadily drifting to a pauper school. For the following ten years there seems to have been little improvement. The better-off people obstinately clung to the private, church, family, and neighbor-

hood methods of educating their offspring that largely prevailed in the South until 1865 and in England until a later date. Several hundred thousand dollars had been expended during the thirty-eight years from 1803 to 1841 in the attempt to found something resembling the proper American system of universal education among a people probably more foreign to its spirit and methods than any in the Union. The ideal of the higher education was a term in Paris for that portion of the people of Louisiana still the uppermost in social affairs. The reformed New Orleans schools were somewhat the result of the movement of Horace Mann and Henry Barnard, who were consulted in their organization.

In 1841 a new spirit was infused into the schools of New Orleans by a legislative grant of \$7,500, on condition that the city raised half the sum. One or more schools were organized for each of the three municipalities and one for the secondary education. In 1842 there were in the several portions of the city 300 children in private schools and 2,000 in no school at all. In 1842 the city was divided into three separate municipalities, but the improved facilities offered began at once to tell. The attendance in the public schools rose in one year to 1,000, and by 1844 to 4,000 pupils. It is stated that "the proportion of the pupils to the school population in these schools was as large as in Baltimore or Cincinnati, being equal to St. Louis and New York, and only surpassed in Philadelphia and Boston." In 1844 a single municipality raised by taxation and otherwise \$11,000, and the people of New Orleans were fast learning the fundamental lesson of the common-school system—to put their own hands in their own pockets through the agency of local taxation to supplement the State or charitable aid.

This period, 1842-1845, is noted as the end of the policy that had been adopted by the State for thirty years, of subsidizing colleges, academies, and county schools. The method seems to have been to charter a large number of institutions of learning under church, private, or corporate direction, with a grant of legislative subsidy for a fixed number of years. In the case of the more important institutions, like the College of New Orleans and Jefferson, there were annual gifts of considerable sums. The conditions of the gift were the obligation to school a certain number of indigent children. This policy was pushed with a zeal that testified more to the interest of the legislature and people in the cause of education than to the wisdom of the method of its promotion. The majority, indeed all these seminaries, of whatever degree of merit, were burdened with the same disability. They were all "living from hand to mouth," without permanent endowment, dependent on a capricious student support; the school often little more than the private venture of some enterprising pedagogue. The large number of the schools thus baptized created a strong suspicion of legislative "logrolling;" each locality in the State, through its representative, putting in its claims for a chartered academy, institute, or college. There can be little doubt that there was a fair degree of good schooling through this multiplication of educational institutions, whether in the private school or county academy. But this method of supporting education by State subsidy is invariably ruinous. Thus it ran its race and died of the weariness and disgust of the people, who were stunned by this great clatter of opposing claims and the "thundering in the index" of every new school with a lofty name, the system going out at last in a condition of affairs that left the children without the bread and water of mental life.

It would be beside the purpose of this essay to attempt to give a detailed account of this destructive experiment through a long generation. The historians of the State have given us the names of six colleges, four of which were each, for a brief period, in a flourishing condition, with a promise of permanence. Beside these, fifty academies are named as having existed during a period of less than twenty years. The majority of these no longer exist, or, if their buildings survive, they are appropriated to the uses of the public-school system of the locality. At least \$125,000 had been raised by lotteries. More than \$130,000 had been distributed to acad-

mies in small annual installments. The subsidizing of parish schools had cost the State in thirty-four years \$773,000. The nine colleges "footed up" in the neighborhood of \$1,767,637, and the figures that report the activity of the people of the State in this experiment of giving away public money with small reservation of the power of control over it furnish a very imperfect idea of the result.

The experiment came to an end about the year 1845. The success of the new public schools of New Orleans, under the superintendency of Dr. Shaw, of Massachusetts, sent there by Horace Mann, although they had not been able to reach one-half of the school population, had convinced the legislature that a new departure should be attempted. In 1846 Governor Isaac Johnson, in his message to the legislature, suggested a broad scheme of education, consisting of a university of New Orleans, a seminary of learning, and a system of public schools. The educational committee approved, and, in 1847, as already stated, the first free-school law of the State was passed. It was estimated that there were in the State at the time 29,334 children and youth between the years of 5 and 16. The legal school age was fixed at 6 to 16, while any youth under 21 was admitted to at least three years' schooling. A tax of one mill on the dollar and a poll tax, in connection with the income of the State school fund, were supposed to furnish the financial motor power for the new system. It has already been noted that Prof. Alexander Dimitry, LL. D., a gentleman of undoubted scholarship and a zealous friend of universal education, was chosen State superintendent of schools.

In 1848 the superintendent reports the considerable sum of \$356,230.93 from the mill and poll taxes of the State and the income of school funds. In 1850 692 school districts were reported, with 618 schools and 22,000 children enrolled. In 1852 the number of schools had reached 647, and it was declared that over 50 per cent of the school population was in attendance. There were high schools in nine parishes (counties). In 1861 there were 96,000 educable white children and youth, of whom 38 per cent, and in New Orleans 48 per cent, were reported as in connection with the schools. It should, however, be noted that, with the exception of New Orleans, none of these localities gave the average daily attendance, which is the real test of the condition of the school. This attendance everywhere falls below and, under the circumstances in Louisiana fifty years ago, must have fallen greatly behind the enrollment.

For the nine years from the establishment of the new system of public schools in New Orleans, the advancement had been steady and a success appeared to be assured. In 1841 Hon. Henry Barnard, of Connecticut, had visited the city and the scheme of public education finally adopted was in the line of his suggestions. He was twice urged to accept the superintendency of the system. Probably it was by his suggestion that application was made to Hon. Horace Mann, then secretary of the board of education in Massachusetts, who suggested Mr. J. A. Shaw, of the Bridgewater (Mass.) State Normal School, as a fit person for the place. Mr. Shaw came to New Orleans, and, beginning with the two schools in the second municipality, in 1842, wrought with such vigor, intelligence, tact, and general acceptance that, from 13 pupils, the schools had reached 840 at the end of the first year. By 1850 he had built up a system with 3,155 pupils and 63 teachers. In the first municipality of the city the schools were open in 1844, and from 3 schools, 11 teachers, and 615 pupils, in 1850 reached the number of 12 schools with 50 teachers and 2,010 scholars. In the third municipality, with even a smaller opening in 1842 of 2 schools, 2 teachers, and 110 pupils, we find, in 1850, 17 schools, 21 teachers, and 1,121 pupils in attendance. In the first and second municipalities the system was graded with primary, intermediate, and high schools, established in 1843-45.

These great gains from the feeble condition of public education that had prevailed up to the year 1842 were doubtless largely attributable to the superintendency of Mr. Shaw, who, with Mr. Baldwin as president of the school board, for the first

time placed a system of common school education fairly before the people of the larger cities and more populous centers of the Southwestern States. This success of the free-school system in New Orleans is regarded by the educators of Louisiana as the final transition from the inefficient policy of subsidizing all sorts of educational institutions prior to 1840, to the proper common-school system of 1845-1847, which, in spite of its only partial success, did keep the idea of universal education before the people and educate the State to receive the new departure as the end of all their educational woes, for a permanent policy at the close of the civil war.

Until the year 1842 the State had labored on the plan of subsidizing a succession of schools, really academical, but wearing the title of colleges, and in this vain attempt to build up the higher education hundreds of thousands of dollars had been invested.

With the rejection of this policy in 1842 and the passage of the school law of 1847, began the inquiry concerning the establishment of "a seminary of learning." It was decided that the public interest would not warrant the moving on a line so expensive, especially after a generation of large expenditure and disappointment in this direction. But in 1848 a committee was appointed to consider the subject of a site for the seminary. After four years of the usual campaigning, the legislature secured the amount necessary for the establishment of the "seminary" and selected a plantation near the town of Alexandria, in the parish of Rapides, as the site. In 1853 the bill was passed providing for the founding of the institution. A private estate, fitly named "Pine Woods Seat," was purchased, 4 miles from Alexandria, which, with a subsequent addition, made a generous school estate of 80 acres, valued at \$4,000. The site appears to have been chosen on the principle of the regulation location of the old-time New England country public school-house, as near the center of the State as was possible, with the view in this case also of obtaining favorable water communication on one of the large navigable rivers, which were mainly relied upon for transportation at that date. This parish and the town had also a reputation for interest in education, founded upon the establishment of an academy as early as 1811. From the usual national grant of two townships of land, 80,000 acres, and such additional sums as the legislature could be induced to appropriate, the means of building up the educational support of the seminary were to be obtained.

But it was late in 1857, ten years from the passage of the school law of 1847, when this moderate movement culminated in the appointment of Col. (afterwards General) William Tecumseh Sherman, of Ohio, as president of the new "seminary of learning." The president, at the beginning, seems to have manifested his characteristic energy of administration and undoubted patriotism. In his original address he reminds the students that their seminary is the gift of the Republic. He also took issue at once with the mischievous diffuseness of instruction by crowding the mind with a great array of all the arts and sciences and wrecking the student on the barren shore of mental indigestion or distraction by weighting him with more than was possible for ordinary human nature to endure. As President William Preston Johnston, of Tulane University, more than forty years later declared, President Sherman told the people that there was little fit material in the State even for such an institution as this to set about its studies. Of 71 candidates for the first class, 13 had been rejected as not sufficiently prepared, and the president tells his hearers in his address, "to coerce the institution to receive State cadets who could not read and did not know anything of the studies there pursued would drag it down to a mere common school." The curriculum included the English, Latin, French, and Spanish languages, arithmetic, algebra, and geometry. One hundred thousand dollars was invested in the buildings and the property was estimated at \$136,000. In 1860 \$15,000 per annum was voted as a beneficiary fund for students, and with an income of \$56,000 and an

annual expenditure of \$43,700 the new ship sailed onward, confronting the political perils of 1862.

The history of this institution is soon told. At the secession of the State, Colonel Sherman resigned his presidency, even before he had been able to get his hand fully on the machinery of instruction or discipline. The State seminary was closed in June, 1861; but under a new management it was opened until closed again by the invasion of the Union forces in 1863. At the end of hostilities nothing was left of the institution save the bare walls of the building. In 1865 the seminary was again opened under the presidency of Col. D. F. Boyd, already professor of English literature and ancient languages in an institution at Baton Rouge. After a troubled career of four years, the seminary under financial difficulties staggered toward destruction by the loss of its buildings by fire in 1869. The institution was then transferred to Baton Rouge, where, under a new organization—the State University—it now exists. Up to 1861, 112 cadets had been graduated.

During the troubled period of reconstruction the State government then in power made large appropriations to the university, burdened with the policy of admitting students of the emancipated colored race. In 1872 the legislature refused to make further appropriations and the university, as it was then named, was again suspended. The change in political affairs during the administration of President Hayes, in 1876, brought the institution again into favor with the ruling class. In 1877 it was reorganized by uniting the State University with the Agricultural and Mechanical College in the capital city of Baton Rouge, where it now remains.

The only proper State institution for the higher education in Louisiana from 1845 to 1860 was the university in New Orleans. It was established by the adoption of a private medical college, founded in 1835, the State and city entering into a sort of educational partnership. Between 1843 and 1847 the State University was legislated into existence, with the two faculties of medicine and law, the great Charity Hospital being connected with the medical department for all purposes of professional instruction. In 1850 a chair of political economy and an academical or preparatory department were added to the university, beginning with 40 pupils.

With the exception of an appropriation for buildings, the support of the medical and law departments, and a portion of an estate as a site for the erection of a mechanics' institute, where lectures on scientific and mechanical topics were delivered and a library collected, no great success attended this new departure. By 1860 there were 40 academical students and 113 graduates. The medical department was closed during 1863, 1864, and 1865. Before the war there had been 4,119 students and 1,084 graduates in the medical school. This was the oldest medical college in the Southwest, the third south of the Potomac and Ohio rivers, and the fifteenth established in the United States. The proper university inauguration dates from 1845. The State had contributed generously to the original departments from that period until the close of the war.

The constitution of 1845 provided for the four faculties of the University of Louisiana. The authority was vested in thirteen trustees, with the governor, chief justice of the State, and mayor of New Orleans as ex-officio members, appointed by the governor with the consent of the senate. The department of law was known and noted for the legal talent represented in its professors, among whom Hon. Randall Hunt was conspicuous until his death in 1838. The founding of the legal system of Louisiana on the Roman civil law has always given to this school of jurisprudence an especial eminence in this department of professional education.

As early as 1847 an attempt was made to found the academic department of the University of Louisiana, but the State was estopped by a constitutional provision from the granting of additional contributions, and with the exception of a

few small private schools nothing was attempted. For a time the Rev. F. L. Hawks, D. D., LL. D., was president of the university, and Prof. Geo. C. Anthon, later of Columbia College, New York, occupied the chair of the Greek and Latin languages. The failure of the legislature in 1846 to make an appropriation compelled Professor Anthon to establish a preparatory school. President Hawks resigned in 1849 and Professor Anthon in 1850. The appropriation was continued for four years, at the end of which, in 1850, a full faculty was appointed. In 1851-52 there were 15, and in 1853-54, 13 students. A succession of presidents succeeded and the legislature was persuaded to make a few small contributions for buildings and furnishing. From a feeble existence the collegiate and preparatory departments emerged, about 1860, when there were but 40 students in the one and 100 in the other. In 1861 the institution closed, not to be opened until 1876. It will be sufficient for the purpose of this essay to state that all the departments of the University of Louisiana in New Orleans are now included in the corporation of Tulane University, by far the greatest achievement ever made in the State of Louisiana in the direction of the higher education, and one of the most hopeful and justly distinguished of the new seats of learning that have sprung up in the South since the dark days of sectional strife. Under the able presidency of William Preston Johnston, with an increasing attendance and a very able faculty in all departments, including the admirable arrangement of the Sophie Newcomb College for young women, Tulane University, in its beautiful group of new buildings, enters upon the century with a splendid prospect for its own success and a brilliant prophecy for the educational future of the city and State.

Although the purpose of the present essay is to present an accurate record of the development of the common school under State and local support and supervision in Louisiana, the story would be incomplete without a glance at the common-school environment, especially the denominational religious schools. We have seen that in all the States of the Union, from their earliest colonial or Territorial condition to their present situation as commonwealths, the condition of public instruction has depended largely on the state of public opinion concerning the fundamental question of the right and duty of the different religious bodies to assume the chief, or sometimes the absolute, control over the secular education of children and youth. In several of the foremost of the older States, largely settled and administered by a Protestant Christian population, the establishment of the common school was delayed sometimes well into the present century by the obstinate rivalries of the religious sects concerning what is called "the religious question." They all held in greater or less degree to the belief that the school is practically an annex of the church, and should be used as a legitimate agency of sectarian religious propagandism. But in a State like Louisiana, settled and for many generations dominated socially and politically by a population drawn from the Catholic countries of Europe in the seventeenth and eighteenth centuries, it is not remarkable that even to the present day this factor must be considered in estimating the growth of the American system of unsectarian public instruction for all classes and conditions of people, in schools common to all and responsible only to the whole people as represented in the State. It would be manifestly unjust to bring against such communities the charge of indifference to education, or of unusual ignorance among the well-to-do class, on the ground of their long-continued neglect of, or even hostility to, a system of education at variance with the teaching of their church on this point of honest and radical difference of opinion.

While the State of Louisiana, despite a very intelligent and zealous common school public, generally backed by the public authorities, State and national, has never succeeded in achieving the success in the working of a public-school system of the majority of American States, it is also true that few American Commonwealths can boast a more attractive and justly distinguished body of superior

people in all departments of life. This to a degree can be attributed to the fact that within the past century no Southern American State has so profited by the immigration of able and even celebrated people from all parts of the Union and all foreign nations as Louisiana. The present writer calls to mind a private dinner in New Orleans, given by the learned and worthy rabbi of one of the Hebrew synagogues, where the eight guests, beside the host and hostess, represented as many European nationalities, all gentlemen of high personal consideration in the city.

And among the descendants of the original settlers of Louisiana from the Latin nations has been developed one of the most interesting of the many constituents of our cosmopolitan American life. From the earliest period of colonization until the outbreak of the civil war it had been the habit of the superior class of these people to send their sons to Europe for the secondary and higher educational training. Their young women had been to a great extent schooled at home, although many were sent North or even abroad. A complete history of the elementary, secondary, and higher education of this portion of the people of Louisiana would throw light upon the past record of the common school in the State, which is greatly needed for a just estimate of the education of the superior class.

The first of the seminaries established under the auspices of the Catholic Church for the schooling of girls, was founded by the Ursuline Sisters in 1727, and remains to this day one of the most prominent of its class. It has always been under the management of a high grade of teachers, and has aimed to fill out the highest ideal of female culture cherished in this communion. Its influence upon the social and public life of the State can hardly be overestimated. This was one of the earliest schools for young women established in the South; and it may be well questioned if the training therein received in New Orleans, from its earliest settlement, for the class of girls who represented the majority of its people, was not equal to that at the same period obtained by a corresponding class in any city of New England or the older Middle States.

In 1818 the Order of the Sacred Heart established a seminary of that type in St. Louis. In 1821-1825 this work was transferred to Louisiana, and several primary schools were set up in different parts of the State. It should be noted that all these church schools did not confine their labors to the daughters of the better-off families, but labored faithfully among the Indians and negroes, and to a considerable extent, especially in the earlier days of the colony, did hospital duty.

In 1837 the Society of Jesus established St. Charles College in the State and a similar institution in New Orleans in 1847. The latter was indorsed in 1856 by the legislature as a full university, as the College of the Immaculate Conception, under which name it still remains a flourishing institution, with an attendance in 1890 of more than 460 pupils of all grades.

In 1856 the Silliman Female Collegiate Institute was located at Clinton, East Feliciana Parish, under the auspices of the Presbyterian Church, and has retained its importance until the present time. The Methodist Episcopal Church is represented by the Mansfield Female College, in De Soto Parish, founded in 1854, with some assistance from the State in 1855. After a suspension during the war it was revived and is still in successful operation.

The Centenary College was a descendant of a college before mentioned. It dates from the year 1839, and owes its present existence to the zeal of several eminent divines of the Mississippi Methodist Church South. Its present name commemorates the one hundredth anniversary of the birth of John Wesley. First established at Brandon Springs, Miss., in 1845, it was removed to Jackson, La., and set up in the buildings of the College of Louisiana at that place. In 1860 it had reached an attendance of more than 200 students. In 1886 the number had increased to 259. During the war it suffered greatly from the alternate occupa-

tion of the place by both armies, and seems never to have entirely recovered from the wreckage of that period.

Jefferson College was reclaimed for a season from the decline suffered by it abandonment as a State institution. During the years 1862-63 it was occupied as barracks and almost destroyed in its building, furnishing, educational apparatus, and library. In 1864 it passed into the charge of a Catholic order and now exists under the name of St. Mary's Jefferson College. Franklin College, one of the original beneficiaries of the State, is now ruined.

The Baptist denomination is represented by Mount Lebanon University, established in 1853. During the war the endowment funds were lost, with the usual damage experienced from military and hospital occupation. A fire in 1887 completed the wreck and swept away all that had been done since the doleful days of 1861-1865. The institution is now in operation and is one of the few coeducational colleges in the State.

These are only a few of the great number of schools of every grade, private, neighborhood, family, denominational, and corporate, that within the past one hundred years have been so largely the educational dependence of the more favored class of the people of Louisiana. Although but few of any importance survive, the buildings of many are utilized by the common schools of the State, notably one by the State Normal School at Natchitoches, and the city of New Orleans even to the present day occupies a large number. The majority of these schools have labored under the disadvantage of an incompetent ideal of the education of young women. Although often assuming the much-abused titles, college, institute, etc., the majority of them have never risen above the ordinary high-school grade, with a distinct emphasis on "accomplishments," although an ambitious student could often acquire the foundation for a superior training in the classics. The great defect in these, as in the majority of schools of this class, is found in a superficial and pretentious habit of making "art" and "fancy work" of various sorts a prominent feature in the curriculum. But in almost every school of this sort there was found at least one, and sometimes more than one, really superior teacher. Ralph Waldo Emerson advised his daughter on going to a boarding-school "to find out who was the best teacher, and study what he taught." And as every successful student in any institution of learning can usually, like Thomas Jefferson at William and Mary College, trace his first impulse to honest mental work and the love of learning to one man or woman who for the time has been to him the representative of all that is worthy of achievement in the realm of knowledge, we should not underrate the importance of this class of institutions in the past.

The Catholic parochial school system has been an important element in the schooling of large numbers of the original population in the Louisiana territory, and to-day is responsible for the entire school training of multitudes of children in this and other States of the Union. While it has prevented, and still does largely prevent, the complete development of the common school, it has furnished the only opportunity of even an elementary schooling for many thousands of the children and youth of the State, and has been a powerful influence in the moral and religious training of the least instructed class of the white population.

At a later period, until the occupation of Louisiana by the Union Army under Gen. N. P. Banks, fresh from his experience in the common-school work of Massachusetts, the negro population of the State, with occasional exceptions, was left in absolute educational destitution. Even at present more than two-thirds of this people, until recently a majority of the population, are illiterate, after a generation of such schooling as has been possible in this all-out-doors Commonwealth. But of late, largely owing to the influence of several great schools established by the Northern churches, and the support of a State academical and industrial seminary, all of them every year more interested in the introduction of indus-

trial training for both sexes, the prospect for this important class appears to be improving.

The revised State constitution of Louisiana for 1845 provided for a complete system of public education, including free public schools, a "seminary of learning," and a "University of Louisiana," with stringent provisions for the protection of State school funds and a State superintendent of education to supervise this department. In 1852 a second revised constitution, in even more elaborate language, pledged the Commonwealth to the same policy. For sixteen years, from 1845 to 1861, the breaking out of the civil war, the State authorities labored in apparent good faith to translate this beneficent promise into an equally beneficent fact for every parish and school precinct of the 46,301 square miles of the extended area of Louisiana. It is estimated that during this period of sixteen years, while the public schools were in actual operation, the State expended the sum of \$3,840,000 (according to some authorities \$4,890,000) on the upbuilding of the system.

The public schools were supported by the income of the State fund from the school lands donated by the United States (786,000 acres), the taxation of 1 mill on the dollar of all assessed property, and after 1855 an additional poll tax of \$1 levied upon all the white male population over 21 years of age. The appointment of Mr. Alexander Dimitry as State superintendent was an assurance of the intention of the public authorities of the Commonwealth to try the experiment of universal education in good faith.

The number of educable white children from 5 to 16 was estimated in 1845 at 30,000, although the schools were open for at least three years to every white person under the age of 21. In 1847 the revenue available for the schooling of the children and youth was \$356,000. In 1850 there were, by a somewhat loose estimate, 692 school districts and 618 State public schools, with 22,000 children in attendance. In 1852 there were 647 schools outside the city of New Orleans, attended by half the school population from 6 to 16, with high schools in several of the parishes. By 1861 the attendance had declined to 39 per cent of the 96,522 educable children, although in the city of New Orleans 48 per cent was claimed. A superior high school was in operation at Baton Rouge, the capital city. In 1855 it was reported that in 681 school districts 687 schools, in 87 parishes, were in operation eight months in the year, there being 62,682 children in the State between 6 and 16, of whom the average school attendance was 36,000, with 1,000 teachers employed, \$250,500 being expended.

With this flattering record it is not easy to understand why the governor of the State in 1855 could report the public school system as in "an unsatisfactory condition—almost a failure." In 1856 the State superintendent, Dr. Samuel Bard, in an address delivered before the general assembly of the State, declares that more than \$2,000,000 had been appropriated for the public schools since their first organization; yet the fathers of the State had made no adequate provision for schooling the children, and in great measure this large expenditure had produced no effect. He declares that "within the past year, 1855, in 30 parishes 12,000 children attended school and 11,000 did not, there being paid out to teachers \$114,000 from an appropriation of \$142,000." These figures he presents "to exhibit the present operation of the system." It was evident, according to the speaker, that "nearly one-half of the white children of the parishes had not derived any advantage from the system." He urges on the legislature the passage of "a plain common-sense school law, such as could be drawn up by three business men in a short time." He complains that the State superintendent of education is compelled to work "in a sort of cane-brake entanglement of faulty and inefficient laws," and demands that he should have an opportunity to be indeed the head of a working system of education. He urges the training of teachers from "home material," and deprecates the habit of depending for teachers on the North, as they are out "of sympathy with Southern ideas and conditions,"

etc., and suggests for this purpose the establishment of a State normal school, with a model school annex, to create a proper teaching profession. About this time we hear of the formation of a school teachers' association, which seems to have been an attempt to revive a similar organization founded in 1838.

In 1855 Governor Herbert confirms the declaration of the State superintendent that "the scheme may be considered almost a failure. This was predicted several years earlier by men who had made the subject of public education the study of their lives. But their warnings were not heeded. A plan was inaugurated at one session of the legislature and entirely modified at the next. This system was first deprived of some of its legitimate power and of its means of influence. The functions of the body were thus transferred to some other agent, whose labors were afterwards curtailed of their proportions. It is not a system; it is a weltering confusion of chaos."

One has only to study carefully the amazing medley which, under the name of the school laws, in 1855, was sent forth from the statehouse, with the addition of the numerous enactments in behalf of favored localities, with a commentary of the social and material conditions of life in a rural country like Louisiana half a century ago, to understand the deceptiveness of the educational statistics in the department of common-school instruction during those sixteen years. It is almost incredible that, with such a division of responsibility and with so little power for the enforcement of the statutes, anything could be well done, or that the different agents employed could work with any degree of energy without perpetual conflict of opinion amid "confusion worse confounded." The State superintendent of education under such conditions could be only an amiable figurehead, poised on his educational lookout of contemplation over a realm of confused and misdirected activity. A radical mistake seems to have been made by intrusting the most important duties of administration to officials who in other States would be working on a good salary, but these were police justices, county clerks, etc. These persons, already burdened with the duties of their own peculiar offices, could only be held to the additional labor of superintending the administration of a system of common schools by the offer of a competent salary, for which there was no provision. In many cases they might have been personally indifferent or even hostile to the public-school system and would labor with more effect on the line of "how not to do it" than elsewhere.

Between them and the "directors" chosen by the voters of the school districts there must have been an endless opportunity of collision for precedence in administration and a general habit of misunderstanding. The complicated business of the management of the township school lands not under the control of the State was in itself sufficient for a conflict, even among officials of first rate executive ability. When we add to this the environment of the public school, the constant pressure of an ecclesiastical power always and everywhere pledged in advance against the American system of public education, a power which to a majority of the white people of Louisiana was practically a higher law, the sparseness of population, and the strange mixture of peoples, we need not wonder that, with the best intentions and for the time and place a generous expenditure of money, the work of consolidating the people in the support of an expensive system of common schools should have languished until the war came in like "a great flood and drowned them all."

The attempt to treat the history of such a condition of affairs as prevailed in this long period of, maladministration of the common-school affairs of Louisiana during the twenty years, from 1845 to 1865, would be a well-nigh hopeless and certainly unwelcome task. The lack of cooperation is evident at every point. Indeed, it was virtually impossible in a state of society so essentially aristocratic as that of the Louisiana of half a century ago to find that remarkable power of public administration, at once conservative of the best in the past and always on

the lookout for the necessities of the present and the possibilities of the future, which is the marvel of our American republican order of society, and never can be understood save by a people trained in the habit of "working together for good."

One exception to this failure in Louisiana was the success of the public schools of New Orleans, which, under the direction of a capable executive and an able educator, did fairly compass what they set out to do. In 1858 a boys' department was added to the Girls' Public High School of the city, subsidized by a gift of \$5,000, distributed at the rate of \$50 per capita to the students. In 1860 the State appropriation was raised to \$10,000 for buildings, conditioned on the city raising a similar amount, and that 48 pupils selected by the governor were to be admitted free of tuition.

The testimony of the faithful Dr. Lusher, who at a subsequent period acted as local agent for the Peabody Educational Fund in the State and as principal of the Peabody Normal School, is to the effect that these graduates were preferred above others and justified their "calling and election." But after the year 1858 every step in educational reform was a step toward the dark cloud of the oncoming civil war that, in 1860, swallowed up the entire South in a horror of darkness and confusion, wherein everything done for the common school since 1845 disappeared as under the stroke of a cyclone.

The outcome of the twenty years' work of the public school system of New Orleans—from 1841 to 1861—is given in the reports of the superintendent, Mr. William O. Rogers, so long a faithful servant of the people of that educationally afflicted city during the turbulent years of war, reconstruction, and rehabilitation until 1882, when he became an important official of Tulane University. According to this document it appears that, beginning in 1842, with a little group of 13 scholars and 2 teachers, in one schoolroom, under Mr. J. A. Shaw, the attendance increased to 319 in a month and 1,397 at the end of the first year, with an average attendance of 840. From that date the number steadily increased until, in 1859-60, there were 6,083 names on the register, with an enrollment of 3,415 and an average attendance of 3,044, with night schools containing 753. During these eighteen years 12,379 boys and 11,014 girls had entered the schools—23,393 in all.

The system in the first district was graded into district, high, normal, and night schools. Of these, ten were district schools, each district including a department for boys and girls, each school including four grades. As usual, the primary schoolrooms were densely crowded, and the superintendent cried aloud for more and better houses and more ample outdoor room.

Eighty-six boys had been admitted to the high school in 1859-60. The superintendent magnifies the importance, now unanimously acknowledged, of separating the small number preparing for college from the majority who were only taking a period of the secondary education as a preparation for active life, and urges the necessity of a high school building. There were 148 pupils in the girls' high school, which seems to have been organized in a practical way, free from the regulation incubus of Latin as a compulsory study, while the French language was very properly, in New Orleans, made a condition of graduation and promotion. A library and lyceum society had existed in the city since 1844, with a collection of nearly 10,000 volumes; 10,500 volumes had been read during the year, one-half the number "works of fiction." The superintendent of schools was the librarian, and seems to have been working on the same line as the present union of the public library and common school. A night school of 753 pupils and model schools with an attendance of 500 were testimony to the interest in education of the white laboring class. The State Normal School in this district made its third report. The city had complied with the conditions of the State appropriation of \$10,000, by the erection of a building at a cost of \$20,000. One hundred and sixteen pupil

teachers had been admitted, of whom 67 remained through the year. A preparatory class had been organized. The total expense for the entire system of public schools in the city in 1860 was in the neighborhood of \$90,000.

The first report of Superintendent Dimitry, first of the State superintendents, at the end of a nine months' service, gives 23,000 of a school population of 43,000 in attendance on the schools, at an average cost of \$6.21 for the school term. Thirty-nine of the 47 parishes of the State showed 704 school districts, with schools in session during an average term of six months and thirteen days, the entire expenses being \$340,000.

It would be instructive to quote largely from the report of Superintendent Dimitry at the end of the first year's experiment of the new system of general education. He appreciates the difficulties of the undertaking, but "he has never despaired of the cause if it shall be only reasonably fortified against unreasonable assault. With practical fortitude to bear the toil, with intelligent agents to carry the schools through their probation, and means measurably adequate to sustain them in their growth, there is no mistaking the result. Many a day will the friends of education have to struggle before they can get the people to realize the idea that the first of rights is the right of mind and that all others are denominations of this. It is a question between money and mind, the gift of God to creatures fashioned after His own image for incomprehensible destinies." Lofty words and true; a stern and wise summons to the people of any State yet battling in the everlasting conflict of mind with all its enemies.

The chronic weakness of the system of American common schools appears here, as in every State of the Union. It comes from the fact that the system of universal education is so largely conditioned upon the development of an urban as opposed to a rural civilization. In the governments of central Europe a despotic civil power does compel the masses of the people, even in the densely populated cities, to give their children a moderate amount of schooling for the use of the common life of the European subject. In our own land, whose institutions all tend to the creation of an exaggerated individuality of opinion and action, especially in the Southern States, where this feature of society was always most evident, it requires more than laws on the statute book or the most enthusiastic acceptance of educational systems to keep our strangely-mingled populations up to their full duty to their children. Compulsory education in the European form is here a virtual impossibility. Only a degree of popular interest never before attained in any land can suffice for the steady support of a system of free education subsidized by the State and sustained by local taxation. But, on the other hand, the moral and patriotic obligation to do this and the doing it in any degree is in itself a most valuable training of the whole community in the duties of a good citizenship in a republican state. That at the end of the first quarter of a century following upon a great civil war that swallowed up all educational affairs in the 16 Southern States of the Union, the responsible classes of all these Commonwealths have at one supreme effort lifted themselves up to "the height of the great argument" of universal education for all their people, is the best proof that the stern experience of their past half century of school life has not been in vain.

This appeared when, at the first opportunity offered for concentrated public action, from 1865 to 1880, the superior class in every State of the South took up the common school for all classes under the most discouraging conditions and carried it on after a fashion that won the approval of all civilized portions of the earth. The entire expenditure of the State of Louisiana in the attempt to support an adequate system of public instruction from 1847 to 1866, the close of the civil war, was \$4,795,000. Of the large sums voted during the war and the early period of reconstruction a considerable portion evidently did not reach the schools. Adding to this the sum appropriated to colleges and academies and other secondary

institutions, the entire sum expended for thirty years reached the amount of \$16,450,000. We must remember that this was in the day everywhere of comparatively small expenditure for public education. We can not withhold testimony to the public spirit and zeal of the people of Louisiana in the cause of universal education. In New Orleans in 1860 the salaries of teachers in the public schools were well in advance of the majority of cities in the Union, \$2,280 for principal of high, \$1,500 for master of a grammar, \$1,020 for several lady principals, and \$600 for women assistants. Well might President William Preston Johnston, of Tulane University of Louisiana, in his able address on "Education in Louisiana" before the National Association of Teachers, in 1886, say: "The scattering of resources is really a squandering of public funds, and means waste and ruin, while concentration insures strength, stability, and ultimate success. It would be hard to find a more pertinent illustration, and the lesson has its value elsewhere than in Louisiana."

Mention may be made of the singular misappropriation or absolute waste of several large benefactions. Several years ago Hon. Randall Hunt, of New Orleans, read an address upon the subject of these large gifts which had been left to the State of Louisiana and the city of New Orleans. The record was a startling history of the loss of great benefactions and the strange neglect and misuse of golden opportunities for the children and youth. Beginning with gifts of houses and lands during the first years of the colonial life of the country in New Orleans, an illustrious company of benefactors could be named.

Julian Poydras, in 1838, established the Poydras Academy in Pointe Coupee Parish. The sum donated is not given, but it was amply sufficient for the additional support of two primary schools in each ward of the city. In addition to this Mr. Poydras established an orphan asylum. Both these institutions are in operation to-day.

Alexander Milne, a native of Scotland, left in 1839 a large amount of real estate in New Orleans to found an asylum for white orphan boys and girls, of which no trace remains to-day. He also founded a school in his native place in Scotland, which has been cherished and is still a reliable seminary of the secondary type.

The most munificent gift to the cause of education, perhaps the largest single benefaction of the sort in the country at the date, was found in the will of John McDonogh, who died in 1835 in New Orleans, leaving behind what was estimated as the largest fortune in the Southern States, for purposes of general education and charity. John McDonogh was born in Baltimore, Md., in 1779. His parents were Scotch people, in very moderate circumstances, but evidently persons of strong character and unusual intelligence. They gave to the boy such schooling as was at hand, and especially a love for music, which he says "acted as the charm of my existence, and was in many ways essentially the source of the little religion I possess." At an early age he was put to work as a commercial clerk in a house concerned in large American and European transactions. In 1804, as the result of two voyages in the interest of his employers to New Orleans, he settled and lived there until his death, in 1850, at the age of 71. In commercial pursuits he amassed what was then regarded a great fortune, and was reported as living in "magnificent style," a notable character in society, as early as 1809, at the age of 30. He served in the defense of the city under Gen. Andrew Jackson in 1815, and in 1819, at the age of 40, removed to a plantation on the "shore" of the Mississippi River, opposite New Orleans, where he lived in great seclusion, indulging his personal humors, with many of the eccentricities of bachelor life, until his death. He is said never to have passed a night in the city after this removal, and every morning was rowed in his skiff by his colored servant across the broad water to attend to his business in town. His later occupation was the making and caring for his real-estate investments in the growing metropolis of New Orleans and in various other favorite localities. His correspondence with learned

men in the country was extensive, and he was a frequent contributor to the press. He never married and had no heirs at law in whom he was especially interested. In his will he left a small estate in lands to the children of a sister; he emancipated his slaves and gave to each a Bible, and made arrangements for a free passage to Liberia, with a direction of how to get a living when there.

The remainder of his widely scattered property he bequeathed, in equal portions, to the city authorities of New Orleans and Baltimore, for the establishment of free schools and institutions, where the poor of all classes and both races should be educated, free of expense, in the common branches of an English education, with a proviso that the Bible should be always used as a principal reading book in all the schools. The will provided that none of his real property should ever be sold, but be loaned to good tenants for a period not to exceed twenty-five years at a time in order that all his possessions might be concentrated in a permanent fund to be forever appropriated to the cause of education. One annuity was reserved of \$25,000 a year to the American Colonization Society for the colonizing of free people of color during forty years in Africa. A second annuity, one-eighth part of the net yearly income from his entire estate, was to be paid annually until the entire sum was \$600,000, for an asylum for the poor of both sexes and races. A third annuity of one-eighth of all the yearly income of his estate was given for an institution for the relief of destitute orphan boys to the extent of \$400,000. To his native city, Baltimore, he bequeathed one-eighth of his estate, to the extent of \$3,000,000, for the establishment of a "school farm" for the use of poor male children, first in Baltimore, afterwards in every city and village of the State of Maryland, then in all the chief manufacturing cities of the East, the recipients to be of all classes and conditions of children and youth from 4 to 16. The pupils were to be supported in the institution, given a good English education, taught agricultural and mechanical trades, and instructed in the Bible and the Christian religion, the school farm, after forty years, becoming the residuary legatee of the asylum fund. After the lapse of the other testamentary funds all the property was to be concentrated in two grand portions for the education of the poor children of Baltimore and New Orleans.

During his thirty years of reclusive residence opposite the city Mr. McDonogh fought hard in various ways with large numbers of people in the city. He complains, in his will, that "every man's hand is against him," and draws up his severe indictment of a popular desire to plunder, harass, and generally insult him. But he writes that he leaves behind money enough to educate in the knowledge of the Lord and in the schooling of a good English education, if possible, every poor child in the States of Louisiana and Maryland.

The list of his estates thus bequeathed to the holy cause of education, if reliable, would seem to indicate a fortune larger than any man at that day possessed in the South, perhaps larger than any estate in the country. The bulk of it was in real estate, estimated by himself at a large future valuation, founded on his expectation that New Orleans "would become one of the greatest cities of the world." If it could have been collected and administered in the way he had anticipated, his anticipations might have been realized: "A huge mountain of property that would yield its increase to the honor of God and the benefit of generations yet unborn through all ages of the world."

But this grand benefaction suffered the fate that befalls so many magnificent schemes of public philanthropy, of which more than one example can be quoted to-day. A cloud of contestants rushed to the assault, and what with boundless litigation, the claims of defective titles, the popular clamor over his personality, and possibly a jealousy of his including the colored race in all his bequests, the wreck of the vast estate was almost completed. The result of several years' contention was that \$1,500,000 was finally passed over to the cities of Baltimore and New Orleans. It is estimated that a fair treatment of the property would have

realized \$10,000,000. From what is left the city of Baltimore has established an institution of the kind indicated in the donor's will. The city of New Orleans realized a fund of \$750,000, from which eighteen public schoolhouses had, up to 1898, been erected, with a fund estimated at \$1,800,000. An asylum for white orphans has also been built up from the remains of the McDonogh and Milne funds.

The popular opinion of the wreck of an immense estate is, however, believed by well-informed authorities to be not well founded. The estate is said to have been greatly overestimated by the owner, its value depending on the optimistic dream of a metropolitan greatness of New Orleans that never came. The plan itself, it is believed, was impracticable and so complicated and weighted with impossible conditions that it could never be executed, and in consequence it went the way of all exaggerated and romantic bequests conceived in the dreams of a recluse.

One result of this benefaction, which bears on its face the impress of the consecration of its donor to the cause of universal education, though hidden from him, has in a way come near the accomplishment of his benevolent intention. The school system of New Orleans, for which so much had been attempted in its earlier days, during the years following the civil war was so depressed from various causes that its most intelligent and devoted friends anticipated the most serious damage to the cause of free education in the city. It is not impossible that the provision of the present McDonogh fund, which resulted in the building of eighteen common-school houses of a style that attracted crowds of pupils and kept the schools before the people, was a very decided element in the final turn of the tide in the cause of public education in that great city, now, after many years of trial, apparently once more embarked on the flowing sea of industrial prosperity. One of the most attractive features in the condition and spirit of public-school affairs in New Orleans, as noted by the author of this essay in a visit in the spring of 1898, was a revival of interest in the memory of John McDonogh among the entire population of the city. In the schoolhouses bearing his name his portrait was everywhere present, often framed in evergreens, with a perpetual gift of flowers supplied by the children. His birthday is now observed with beautiful ceremonies, his biography read by the pupils of the schools, and a fund is being made up by the contributions of the scholars of all schools and both races for a monument, to occupy a conspicuous situation. The change from the old estate, in which the lonely man, writing his will, declares that "every man's hand is against him, while the children follow him in the streets with perpetual annoyance and insult," to the spectacle of to-day is only another proof of the fact, too often forgotten by the benefactors of the coming generation, that, with all its follies, failures, and depravities, our human nature never forgets those that trust in its essential rectitude. "The righteous are held in everlasting remembrance."

Other bequests of a similar character for the city of New Orleans might be noted, though somewhat apart from the purpose of this essay. The last of these large bequests has been the gift of Paul Tulane, a native of New Jersey, for many years a resident of New Orleans, which, united with the bequests of Miss Howard and Mrs. Newcomb, both of Northern descent, though for many years residing in the city, and the later bequest of Mrs. Richardson to the medical department of Tulane University, have resulted in the absorption of all the departments of the University of Louisiana in the present Tulane University, of which the Sophie Newcomb College for young ladies is the female department, as far as the university course, to which its graduates are admitted on equal terms with young men. This noble foundation can hardly fail to realize the uttermost expectations of the educational public of Louisiana from the beginning. The united gifts of Paul Tulane and Mrs. Newcomb possibly already have reached the sum of \$5,000,000. By the depreciation of real estate in New Orleans the institution has been able to place itself in probably the most attractive groups of university buildings in the South. In thoroughness of instruction, the ability of its faculty, the breadth and

adaptability of its curriculum, the fame of its professional departments, and the well-deserved distinction of its late president, William Preston Johnston, it leaves nothing to be desired except the hearty appreciation and cooperation of the State for its great success. Although the university was established in cooperation with the State, its present organization as a private corporation removes it from any dangerous complication with the ups and downs of State or municipal politics, while its unsectarian religious platform and hearty sympathy with the public-school interest of the city and Commonwealth give to the people the assurance against any narrowness or exclusiveness in its administration.

Especially in the departments of natural science and its application to the leading industries of the State, of the higher industrial, artisan, and artistic training of its students of both sexes, its broad and generous education in the English language and literature, its vigorous development of university extension through courses of popular lectures and instruction of classes outside its regular student body, it has already proved itself a model people's university. One of its most valuable services to the city has been the gathering of an excellent library, reading rooms, and a museum. In connection with the munificent gift of the Howard family for the establishment of a valuable institution for general study and consultation, the city of New Orleans has now, for the first time, a thoroughly organized public library, steadily increasing in value.

The difficulties that have hitherto beset the establishment of the public-school system of the city seemed in 1898 to be overcome. Under the efficient superintendence of the Hon. Warren Easton every department of the common schools for both races was firmly grounded and making decided progress. A new feature is the revival of the former normal school for teachers, with a broader administration and superior opportunities for a practice department. The arrangements for the secondary, higher, and industrial education of colored youth in the State institution and several valuable seminaries supported by the Northern churches are amply sufficient for all reasonable requirements of the city, with large attendance of students from all portions of the State.

Altogether it can be said with truth that in no State of the Union has the intelligent and persistent determination of the educational public to extend the blessings of the American common school to its entire population been more conspicuous than during the long period, covering nearly an entire century, since the acquisition of the territory of Louisiana by the United States. Nowhere have the difficulties and complications of nationality, race, and religion been more serious and apparently insurmountable, and nowhere have the "staying qualities" of an educational public of the American type been more apparent, and nowhere apparently more destined to be crowned at the opening of the new century with permanent success.

MISSOURI.

The loud call of the far-away Republic of Texas for free schools for the children, which resounded through the corridors of the legislature of Massachusetts, the foremost common-school Commonwealth in the inauguration of the great revival of popular education from 1835 to 1860, was followed by the State of Missouri. In 1839, two years after the election of Horace Mann as secretary of the Massachusetts board of education, the State of Missouri enacted its first school law, under which it has gone on "from strength to strength" during more than a half century to its present high distinction in the cause of universal education. This revival of 1835-1860 was not the monopoly of any State, even the States of New England, which first became conspicuous in it. It was a great and widespread

uprising of the whole American people in behalf of a more effectual system of educational training for American citizenship.

Through the first half century of the Republic, until 1830, much had been done in the way of disseminating information, collecting materials, and making various experiments in the direction of the best methods of educating the whole people. The result was that in the most favored school commonwealths the conviction was the strongest that a radical reform, especially in the organization, support, and supervision of common schools, was imperative. The entire group of the Northern States was moved in accord with the heroic labors of Mann, Barnard, and their associates in the old Northeastern States. Even the Southern States, that hitherto had resisted the appeals of their own most eminent statesmen and educators for a more extended schooling of their white population, were profoundly stirred, and in several of them efforts were made to bring the people and legislatures into line with the general movement of the country. In some cases these efforts were not without success; in all cases they were really a step forward, by a considerable body of their people, for better things.

We have already shown to what extent this invitation had been responded to in all the States of the South. It remains to put on record the action of Missouri, one of the most characteristic of the new States of the Union, in this direction. The preliminary steps by which this State paved the way for definite action, from 1820 to 1839, have already been detailed in a former essay by the present writer. The real common-school history of the State of Missouri began in 1839, when the first law for the establishment of a system of common schools was put upon the statute books.

At this date there would seem to have been the most ample provisions for the support of an effective scheme of public instruction, from the generous donations by the National Government of large areas of public lands, made in 1820, on the admission of the State to the Union, and during the subsequent years by important additions. In 1839 the public funds for the support of a complete system of common schools, including a State university in Missouri, were:

First. All past and prospective moneys deposited with the State by the act of Congress of 1836, commonly called the distribution of the surplus revenue.

Second. The proceeds of all school and other lands vested in the State by escheat, purchase, or forfeiture for taxes, with all the interest, dividends, proceeds, and profits of such moneys and lands. All these were known as the "State school moneys."

Third. The county school funds, consisting of all moneys that should be paid into the county treasuries for the use of common schools on account of fines, forfeitures, or otherwise. These were known as the "County school moneys."

Fourth. The original sixteenth section public lands, distributed to all the new States after the admission of Ohio to the Union, retained by the different townships, of which the sixteenth section was a component part. All these, with their income and the forfeitures and fines enforced for waste, trespass, or other causes, constituted a fund, denominated "the township school fund," for the use of the township to which it belonged.

The State fund had been so administered that there could be only a distribution of 60 cents per capita to the 50,000 children and youth between the ages of 6 and 18 in 1840. What were the additions from the county and township funds there seem to be no means of determining.

If the question of "The school in politics" were to be determined by an attempt to comprehend the intricate and political relations of this remarkable school law of 1839, we fear that a somewhat mythical personage, the educational politician, would find less favor than at present in the eyes of "the plain people." The school law of Missouri in 1839 is intolerably prolix, and seems constructed on the principle that common intelligence and honesty were so rare commodities in Missouri,

twenty years after it had emerged from its experience as a savage territory, that every act and device of a public-school official should be surrounded by a thorny and exasperating environment of preventives and defenses. Nothing could have been so sure to invite reaction among the friends, and furnish abundant satisfaction to the enemies of a common-school system as a statute of this quality, requiring the professional training of "a Philadelphia lawyer" for its comprehension and an omniscient court for its enforcement.

In brief, its provisions were—

First. The determination of the school fund of the State, as already noted, and the direction of the legislative and executive power of the State as the guardian and dispenser of its bounty to the children.

Second. A State superintendent of education, to be chosen by the State legislature and commissioned by the governor, to hold office for two years.

Third. The governor, attorney-general, and State superintendent of schools were made a board of commissioners for the management of the State school fund. A portion of the stock of this fund had already been invested in the Bank of Missouri.

Fourth. The sum distributed from the State fund should not exceed 60 cents for each child in the State, from the ages of 6 to 18.

Fifth. No township or school corporation could receive State moneys unless supporting a school of three months in the year by a qualified teacher.

Sixth. The moneys remaining after the general distribution should be added to the principal of the fund.

Seventh. The salary of the State superintendent of schools, for the vast labor of organizing and supervising the common schools of a commonwealth 70,000 square miles in extent, with a population in 1840 of 388,702, of whom 58,240 were negro slaves, with a very imperfect appreciation among the people of the meaning and functions of the common school, was \$600 a year.

Eighth. Each Congressional township was constituted a school district, which, in educational affairs, was subject to the county court, which exercised the general executive educational power, and used the common county officials as its agents.

Ninth. This county court managed the county and township school funds and had the power of loaning them, at a legal rate of interest, for a fixed term of years. When a school township was organized, the court, by the agency of the county officials, distributed the respective moneys from the income of the township, State, and county funds.

Tenth. The township was authorized to elect a commissioner and two to four inspectors of common schools, and a township clerk, this board constituting the school directors of the township. This local board should divide the township into a convenient number of school districts and apportion the township moneys among them, the conditions of the distribution being that each district should maintain a school of three months with a qualified teacher. The commissioners were the custodians and distributors of the township funds, and in case the funds were not used, they should be returned to the custody of the county court. These directors should report to the county clerk all needful particulars of the condition of the schools. The commissioner and inspectors of the township should examine teachers. All these officials were surrounded by an almost impenetrable fortress of rules and regulations concerning the faithful performance of their duties and the penalties of failure, and a fine of \$5 was exacted of any man elected as a school official who refused to serve.

Eleventh. Every school district should be furnished with a complete outfit of officials, consisting of three trustees, a clerk, and a collector, elected by popular vote. The district majority of voters could raise money by a tax on the people for the building and care of schoolhouses; also had the choice of the site; the tax not to

exceed 50 per cent of the amount of taxes imposed by law for State purposes. This body of local trustees should have power to hire teachers and fix their salaries, to establish schools for four terms in the year, and to fix a rate bill to cover the expense of the schools above the sum donated from the State fund. Each person sending a child to school should be assessed for a due proportion of the fuel used in the schoolhouse. The trustees should report to the directors of the township. All these local officials had the right of appeal to the State superintendent in any case affecting their administration.

Twelfth. By action of the county court, all towns and neighborhoods to which the United States Government granted special donations of school lands in 1812 might be incorporated for school purposes. Their school affairs should be under a board of five to nine directors, elected by the qualified voters of the place, who should have entire control of the educational affairs of the corporation. The city of St. Louis was especially authorized to conduct its educational municipal department under the direction of "the board of president and directors of the St. Louis public schools."

By an amendment to the school law in 1841, the power of appeal to the State superintendent of education was taken away and given to the county court. In the same year the office of State superintendent was abolished and his duties added to those of the secretary of state, with an additional salary of \$300 per annum. By an amendment in 1843 the sum distributed by the State must be limited to \$1 per scholar, and the moneys not called for must be reinvested.

It can not be a surprise that the second report of Superintendent James L. Minor presents the facts in the response made by the people of the State to this elaborate and exhaustive statute. In the introduction to this report, November 30, 1842, three years after the passage of the law, the superintendent says: "I regret that I have not the satisfaction of reporting to the legislature the fact that our system of common schools has been adopted generally through the State. The citizens of some counties have good schools under the provisions of our law, and have availed themselves of the advantages which it offers. But with many others a lamentable indifference, and in some instances a decided repugnance, to the system have been manifested, which have had the tendency, I fear, to retard, so far as the influence extended, the progress of general instruction." He acknowledges that objections have been made to the law itself as a formidable obstacle to the desired progress in education. "Its length, the number of officials which it creates, and the complicated detail of duty which it imposes" have been urged against it, as well as the sparseness of our population and the freshness of our country and the migratory and unsettled prospects of our people.

The superintendent devotes a good share of the middle space of his report to controverting this impression, and proving that the law is especially adapted to meet the present and future needs of the rapidly increasing population of the State. But the results of the three years' experience do not seem to justify his contention. Of the 52,000 persons of school age in Missouri in 1841 only three counties, containing 4,774 children, organized schools under the law, and they were attended by only 2,741 pupils. The State school fund had reached the sum of \$558,032.91, and the income available for distribution, at the rate of 60 cents per pupil, was \$19,531.15. Of this, in 1841, only \$1,999.60 was appropriated; leaving \$17,531.54 to be reinvested as an increase to the permanent fund of the State. The superintendent argues strongly against the policy of piling up the general fund while the sum appropriated is such a pittance as to discourage the friends and confirm the foes of public education. The largest amount given to any school district was \$49.20 and to any township of several districts, \$134.40. He says that the sum distributed should be raised to \$2 per capita. The superintendent not only bewails the lack of competent teachers, but he pointedly adds the uncertainty of their compensation, and the consequent want of respect in which they are held

by the community. The habit of loaning the county and township school funds was bearing its legitimate fruit. "In many cases the interest on this loan is paid very irregularly, and in some counties scarcely paid at all. Very little certainty exists in relation to any payment of the teachers from the State, and the chief source of dependence is the voluntary subscription of the patrons of the school, and the interest of the school fund frequently becomes merely a perquisite." The uncertainty of the payment of dividends on the State funds by the State Bank was so great that "assistance from the State seldom enters into the estimate of the salaries paid to the teachers." In general, this form of investment seems to have been characterized by "a total want of all calculation upon the probable operations of the bank. The air is full of high-sounding plans for the better management of these funds; all meaning that a great number of people desire to get their hands into this great pile of public money." The superintendent urges the legislature to hold fast to the present law and push to the uttermost all the opportunities for its more thorough enforcement.

The third report of Superintendent Minor reaffirms the apprehensions expressed for the safety and protection of the State school funds. Although in 1845 the fund had increased to \$600,000, the State Bank, in which it was invested, had failed to pay dividends. The legislature of 1844 had enacted that only \$1 should be appropriated for each pupil. But the failure of the bank to declare a dividend had thrown the school authorities back on the residue of the dividends left unappropriated in the treasury by the superintendent on the 1st of January, 1842. This failure was even more critical than any before. The total amount distributed by the State in 1843 was \$3,043.80, in the ratio of 60 cents to every child from 6 to 18. The amount available for 1844 would be only \$11,892.42 and in a ratio of 54 cents to each child. Meanwhile the number of children in the schools had increased from 6,192 in 1842 to 12,652 in 1843. The counties which had accepted the system were 28 in 1842, and, in 1843, 42 of the 77 in the Commonwealth. The superintendent urges the removal of the general school fund from the State Bank and the reinvestment in State stocks. He also urges the division of 500,000 acres of land donated to the State for internal improvement, which will furnish a very insufficient sum for any important movement in this direction—to the cause of popular education. By the combination of these funds he maintains that the sum of \$1,200,556.46 could be reorganized as a State educational fund, at 8 per cent, invested in State securities, which would give to every school child from the State 76 cents. The township funds from the sixteenth section lands should further increase the sum by \$2 for each child of school age. This sum, \$2.76, says the superintendent, "would relieve the parent from the whole expense of education, except the board of the teachers, which would impose a very slight burden." He also urges the establishment of a State normal school for the instruction of teachers.

There is no more convincing argument for the American common school than the fact that, when the people of any American State have for even one year had experience of its benefits, it has been impossible, save by a revolutionary crisis like the great civil war, to abolish it or permanently impede its progress. Notwithstanding the discouragement of the first six years of the experiment in Missouri, the fourth report, November, 1846, signed by Falkland H. Martin as State superintendent, shows a decided advance. "Although," he says, "our school system is still in a state of incipency, and must retrograde unless it is cherished by the watchful solicitude and permanent interest of the general assembly, yet, up to the present period, the public expectation has not been disappointed." The superintendent is able to report the satisfactory information that "considerably more than half the counties of the State have proceeded to organize and report to the public officials. In two more years the State school moneys will be appropriated to the children in every county in Missouri." In 1845 \$16,481.70 was distributed among

31,695 children of school age—6 to 18—giving the sum of 52 cents per capita. In 1846 \$23,702.02 was distributed among 40,896 children, 6 to 20, at 58 cents per capita. But as the procession of the children increased in number, the per cent of the distribution of funds diminished; \$20,148.38 available for the army of children 50,000 strong being practically less than before. The radical difficulty seems to have been that the State school fund, then amounting to \$575,000, was invested in the Bank of Missouri, which paid only occasional dividends, at $3\frac{1}{2}$ per cent, amounting to only \$110,000 for the six years of the operation of the school law, whereas at 8 per cent, then and there a reasonable rate of interest, the schools would have received an income of \$300,000. The superintendent urges the legislature to remove the funds from this financial prison house and liberate the bounty provided by the General Government for the enjoyment of the whole people. He also emphasizes the suggestion of his predecessors, that the 500,000 acres of land donated by the General Government for internal improvements, having been divided among the counties by legislative act, will at best afford \$6,000 to each, not enough to build a court-house, and urges their diversion to the State educational fund. He also renews the plea for a State normal school. The original school law of 1839 had proved to be a formidable hindrance to the cause of universal education. "It is," the superintendent declares, "much too complicated. In order to understand it sufficiently well for the most ordinary transaction, a thorough and elaborate study is required, demanding a larger share of the time of the various officers (all of whom render their services gratuitously) than can well be spared by them. Many of its provisions are so conflicting as to be utterly irreconcilable." He urges "a thorough and complete revision."

In 1845-1847 the general assembly reenacted the school law of 1839, with a large number of amendments and a few important additions. Among the latter was one altogether in the line of progress. By the statute of February 11, 1847, the school moneys of the State were ordered to be distributed among all the children and youth between the ages of 6 and 20. Superintendent Martin, in his report of 1848, shows that in 1847 \$48,579.78 was distributed among 55,204 children, 88 cents per capita, although the revised law indicated \$1 per capita as the sum to be appropriated. In the appropriation of 1848 all the counties save six were included. In the 542 municipal townships the justices of the peace, empowered by the revised law to make the enumeration, reported 142,398, an increase in one year of the school population of 90,294, exclusive of the children in the towns which had received special grants of lands from the General Government and were operating schools under local authority.

Under these conditions the sum received per capita would be less than half the previous appropriation. Another year would finish this game of working at cross purposes, which had been the point of chronic weakness in the action of the general assembly. The superintendent declares that in 1849 200,000 children will claim a share in the distribution of the State fund, and the number will increase in accumulating ratio as the years go on. "Unless the State school fund is in some way largely increased in a very short time the amount received by each child will be too small an inducement to keep up the organization which alone can entitle them to the use of the money. Unless prompt measures are adopted on this subject the system itself must gradually decline." He again emphasizes the project of securing what is left of the internal improvement fund, now being distributed in the characteristically shiftless way by which those precious gifts of the General Government were often wasted, as an addition to the school moneys. The revised school act of 1845 is said to have so reduced the responsibility of the State superintendent that he could not be supposed to know more of the actual condition of the public schools of the State than any active citizen interested in the subject. The tendency in all the States of the South at this period to divert power from the State in favor of the local governments, in

this case had made the State superintendency of education a practical impossibility. The superintendent calls attention to the condition of affairs in the years 1845-1847, and once more urges the establishment of a State normal school. The ratio of appropriation in 1848 gave but 40 cents to each child between the ages of 6 and 20.

The new secretary of state and superintendent of common schools, Hon. Ephraim B. Ewing, in the sixth biennial report, December 30, 1850, takes the educational bull vigorously by the horns. He shows that in 1850 the income of the State fund \$27,750.52, apportioned among 173,447 children, gave to each only 16 cents. The Bank of Missouri continued its disappointing career of making only occasional dividends. The estimate for 1851 gives \$64,000, to be appropriated among the children of all save five delinquent counties. A new flirtation with the school law had fixed the minimum school age at 5 years. The revision of 1847 had made it impossible that the State superintendent should be able to collect reliable statistics of public education. His attempts to interest the county authorities to make reports had confirmed Washington's favorite declaration, "Influence is not government." Only half the counties had responded to his request. A vigorous guess estimated the townships and school corporations at 900, with 1,600 school districts. The secretary insists on the necessity of the reinstatement of the State superintendency, clothed with power to obtain the statistical information needed for the proper administration of the system, and a supervision of the involved local machinery. He insists that the number of supervisors should be reduced to one county and one township superintendent, with full power to act in cooperation with the State superintendent.

An inquiry into the condition of the township sixteenth section fund revealed the fact that the amount donated in this way to townships was 1,132,920 acres, of which 531,883 acres had been sold for \$737,000, leaving 551,037 acres unsold, valued at 87½ cents per acre. This, added to the sum already realized, would give a State fund of \$1,206,755. There was a great difference in the value of the township lands, some being of good quality and furnishing an income sufficient to educate the children, while others were almost worthless. The county school funds seem to have been of little account, the moneys belonging to them being often appropriated to the general purposes of county expenditure. The school lands granted to the State were 40,000 acres, of which 31,000 had been sold. On the State school fund of \$575,000 there had been realized in eleven years \$342,472.41, an average of \$31,106.53 per annum.

In short, the chronic failing of many of the new States, acting on the fallacious theory of magnifying local and distrusting State superintendency, seems to have culminated in 1850 in Missouri in a condition of affairs in which the entire system of public instruction was brought to the verge of ruin through the lack of sufficient funds to meet the increasing demand for free public education, a scheme of "making bricks without straw" that wrought the death of many a well-constructed scheme put on the statute books of State and nation for the promotion of the "general welfare."

A small beginning had been made by the statute appropriating \$1,000 a year for the establishment of a department of pedagogics in the State University, which had been established in the village of Columbia, Boone County, in 1844, by the combining of \$177,900 from local sources with a sale of seminary lands, which had yielded \$70,000. It was asserted that in this sale the State authorities "traded off," for less than \$100,000, lands now valued at \$4,500,000, and emphasized the act by refusing for twenty-five years to grant the university any support. The superintendent exposes the infamy of this scheme for capturing the trust funds of the State, and indorses in full the suggestion of his predecessor in favor of a general normal school, with the added recommendation of the State teachers' institute.

In conclusion, he indorses the statement of his predecessor, that after ten years

of experience "the school system was complicated to such a degree as to render many of its legal provisions almost unintelligible, and greatly to impair its usefulness." In addition to this, he notes "the want of a faithful and vigilant supervision and inspection of schools and suitable methods of insuring the success of teachers." All the early schemes of the new States for the improvement of the teaching force, owing to the unwillingness of the people to impose more stringent methods, seem to have reacted with redoubled force on this State.

The superintendent sets forth with great cogency the argument for an effective State, city, and township superintendency of education, each concentrated in one person "with power to act." He closes by showing that the entire available school fund of the Commonwealth—State, city, and township—can not amount to more than \$1,800,000, which, with an annual income of \$150,000, would give every child of sufficient age but 75 cents per annum, and the steady increase of population would only add to the deficiency. In this report the assertion is made for the first time that during the eleven years of the existence of the common school system no responsible public official had plainly revealed to the people of Missouri the extent to which their great gift for universal education was being hampered by the action of the legislature, under the influence of political and financial theorists, who, in the endeavor to favor everybody and allow to every citizen the largest private freedom, so weakened the central power of the State that nothing but confusion and disaster could be expected in a cause so dependent on wise administration as the education of the children of a great and rapidly growing Commonwealth.

In the seventh report, January 6, 1853, Superintendent Ewing does little but reiterate the substance of his former contention, in even more eloquent and convincing terms, at greater length, and with an earnestness, directness, and force so decisive that it was evident that the State had found the first official who had comprehended the height and depth and length and breadth of this great public interest.

In 1853 there was appropriated \$58,411.08 among 193,840 children—30 cents per capita in all save five or six of the counties of the State. The impossibility of obtaining reliable statistics, with no power to command returns, the wasteful use of the public moneys as manipulated by the numerous local officials, the lack of expert supervision, the fearful incompetency of teachers, and the startling fact that from the entire fund, State and township, the children could obtain only 38 cents per capita, and that "the whole income accruing from this fund at the highest rate of interest would be sufficient only to support a three-months' school for a tenth of the present educable population of the State," was a revelation indeed to the educational public of Missouri. In the 56 counties from which statistics had been obtained it was ascertained that of 64,000 children more than 26,000 were not attending school, and a large population received instruction in no school whatever. The superintendent squarely faces the conclusion that taxation is the only remedy for the present unsatisfactory condition in which all the people wish to educate the children, but do not realize what universal education demands from an American Commonwealth. The superintendent urges the privilege and obligation of public taxation as the only way out of the present dilemma, which is rapidly passing over from a popular delusion to a public disgrace.

The report of J. W. Henry, "late superintendent of common schools," in 1854, is a decided falling off from the public declarations of his predecessors. He seems to have almost no effective "grip" on the work he was set to do, and in his general information concerning education in Missouri he appears to be "all at sea." The number of children of school age in the State is estimated at 203,658, of whom only 67,924 had attended the common schools during the past year. The superintendent concludes that at least 67,000 children had attended no school at all. While he seems to believe the legislature has made a liberal provision for the support of the common schools, he goes off into an eloquent arraignment of the indifference of the people to a system of public education supported by an expen-

diture of 30 cents per capita. There is a disparity in the supply of schoolbooks, the local commissioners of each township school system adhering to their own ideas. He pleads for an increase of the salary of the superintendent, who by law is required to visit 103 counties annually and deliver an address in each, and denies the usefulness of such an address, "which would be listened to only by a few literary men of the town." The act of 1849, requiring the State University to establish a department of pedagogics, had never gone into effect, and probably "can not be accomplished without further legislation." In short, the Commonwealth of Missouri had not yet recognized its practical leader in the cause of universal education, although more than twenty years had elapsed since the great note of progress had been sounded on the far-off Atlantic coast by the "grand commanders," Henry Barnard and Horace Mann.

But the period of awakening was at hand. The seventeenth general assembly had reestablished the office of State superintendent of education and located it at the seat of government in Jefferson City; a room in the capitol building had been assigned and the records of the educational department removed to it. But the new superintendent of education, Hon. E. C. Davis, turned to the archives of the State for statistical information and found himself disappointed. Although the State had established a system of public instruction in 1842 and during the thirteen years of its continuance had expended \$1,000,000, independent of large plans and professions, yet, writes the superintendent, "we can boast of no educational statistical materials upon which to base a system or to aid the department in the discharge of its duties." "An infirm policy and a mistaken economy has long held this department subordinate to others." The honor of inaugurating a more generous policy by the legislature is ascribed to "a gentleman from Holt and a member from Boone County." The superintendent, after an extended essay on the blessings of universal education, comes to the point of recommending to the legislature a practice, already established, providing for the education of all by free tuition of students from each county in the State University, to whom shall be furnished the expense of training for the profession of teacher. Money was to be appropriated for erecting buildings and providing the cost of instruction in the preliminary departments. The teachers' institute had sprung up in a number of counties and was recommended by the State superintendent. A recommendation concerning the selection of schoolbooks and methods of instruction furnishes an appendix to the report, in accordance with the provision of the revised school law of 1855. The number of school children and youth in all the counties was 200,346, the number taught in 1854, 74,084; number of male teachers 1,807, of female, 440. The whole amount paid to teachers was \$363,338.25, of which the sum of \$159,367.56 was derived from the common-school fund. There were 1,572 schoolhouses, built at an expense of \$30,487. The total amount applied to the counties was \$178,032.79.

The remarkable improvement in the school affairs of the State here indicated had culminated in the enactment of a revised school law in 1855. By this enactment the office of State superintendent of education, with a salary of \$1,500, had been established. His duties were similar to those belonging to the office in all the foremost States of the Union, among which we notice that of making recommendations for the management of school lands, preparing a uniform course of instruction, and collecting and disseminating information in regard to the plan and construction of schoolhouses. Another most important step forward was the setting apart 25 per cent of the school revenue for the use of the schools. By the new law a village of 200 inhabitants could be organized as a school township and receive a special subsidy from the State fund. The townships still remained under the educational direction of the county courts, as far as the management of the county and township moneys was concerned. The practice of loaning the school moneys was rescued from the loose business habits of the past, and no loans could

be made for a longer period than one year, with ample securities, and the duties of the county officials in this respect were more plainly defined.

A still more important new departure was the establishment of the office of county commissioner of education, to be appointed every two years by the county court, with the power to confer the office upon the county clerk. The duties of the county commissioner were to apportion the school moneys to the townships, visit and inspect every district school in the county once a year, direct the general course of instruction as it might be prescribed by the State superintendent, give encouragement and advice and examine all candidates for teachers, and have a general oversight and care for the entire business of schooling the children of the county, the compensation to be not exceeding \$2 a day for one hundred days in the year, save in the large towns and cities of the State. The old arrangement of three trustees in each district, elected by popular vote, was retained. The district meetings should have power to raise money for building schoolhouses, purchasing a library, apparatus, and school supplies, determine the site of schoolhouses, and distribute the payment for teachers' wages according to the length of the different school terms of the year. They could elect and remove teachers, expel pupils for improper conduct, call meetings for the imposing of a school tax by a majority of the voters of the district, and generally have charge of the school life in their respective beats; they were also to make out rate bills, from which only indigent parents were exempt. Strict directions were given to the trustees for the moral instruction of the pupils. "The English language and its rudiments" were to be taught in all common schools.

A separate article of the school law makes special provisions for the government of towns and villages that have received United States Government land grants for the use of the schools. Each of these can be chartered as a separate school corporation, with a board of five to nine directors, chosen by the votes of all qualified electors, each elector to be a citizen of the United States and a resident and householder of the community. This board of directors can manage the local school funds, lease or loan lands and lots for a period not exceeding twenty years, determine the number of schools, build schoolhouses, employ and fix the salary of teachers, make out rate bills, and generally manage the school affairs of the place. All these different bodies were required to send elaborate reports to the acting supervisors, and they to the State superintendent.

The report of Superintendent W. B. Starke in 1857 confirms the good omens of his predecessor. In the year 1856 there was subject to appropriation by the State the comfortable sum of \$217,684, to be distributed among 272,093 children, in a ratio of 80 cents to each child. In 1857 there was \$242,801.25, and the number of school children had risen to 302,323, a ratio of 78 cents per capita. One thousand and ninety-nine schoolhouses were built in the year 1856, in most cases by private subscription, with \$32,500 by direct taxation. In 1856 there were 2,409 male and 480 female teachers; and a total of \$379,800 was paid for public instruction, an excess of \$113,400.77 over 1855, \$91,000 of this excess being raised by the patrons of the schools from private funds. This report for the first time attempted to state the number of private schools of various grades in the State. It was believed that the number of children attending this class of schools was at least as large as the attendance upon the common schools. This estimate, in 1856, would give 195,000 children altogether attending school in Missouri, about two-thirds of the whole number between the ages of 5 and 20. There were 9 "colleges" and 48 academies, besides a large number of private schools of lower grade, in addition to the arrangements for schooling in public institutions.

In 1858 Superintendent Starke was able to report that every county in the State was organized into the common-school system. In 1857 the amount appropriated was \$235,811.94, the number of children from 5 to 20, 302,323; ratio, 78 cents per capita. In 1858 the amount had increased to \$244,993 and the number of

children to 341,121, only a ratio of 70 cents per capita. Of the sum appropriated in 1858 there was realized from bank dividends on the State fund \$80,440; from one-fourth of the State revenue, \$165,600. Of the 341,000 children of school age, 141,338 were in the district schools and as many more in private schools and academies, leaving about 58,000 between 5 and 20 years of age unaccounted for. But a considerable portion of those, from 12 to 20, had probably been under instruction at an earlier age.

The superintendent returns again to the all-important matter of the qualification of the teachers of the public schools. "Not one in a hundred has ever thought of teaching as a life business or spent time and labor in making special preparations for the duties of this noble calling." Of a majority of the teachers he says: "They are neither of us nor with us, for they come from all parts of the world, and if they live long enough some of them will be in all parts of the world again before they die. Nearly half a million dollars is annually taken from Missouri to pay teachers who have no permanent interest or residence in our State." The transition from this statement to the imperative necessity of normal schools is apparent, and the superintendent enlarges on the history and uses of these important institutions. The critics of popular education who to-day are depreciating the success of the normal-school system, State and city, will do well to refresh their memory by a perusal of the reports of all the early State superintendents of public schools, especially in the Western and Southern States, concerning the fearful incompetency of the teaching force. The fact that after sixteen years of the common schools in the great State of Missouri there were less than 500 women teaching school is in itself a point well worthy of consideration. And the additional fact that largely from the multiplication of facilities for the training of teachers in State and city normal schools the same State is now becoming a great source of supply for superior teachers for the entire vast region at the Southwest, and is known through the Union as a nursery of eminent educators, is a conclusive answer to the reckless and unintelligent criticisms from the friends of the old-time haphazard method of supplying the country with the teachers of all elementary and secondary schools. The superintendent wisely discredits the attempt to supply the present want by the subsidizing of existing colleges and academies, as in New York, Pennsylvania, and other States. He closes this eloquent and practical document by the blunt statement: "The right to hang a man involves the right to educate, and it costs more to try and hang one criminal than to educate one hundred children."

Superintendent Starke returned to the field in 1859 in a report which, in length and importance, casts into the shade every document of its kind that had hitherto been addressed to the half-awakened people of Missouri. Its opening pages are devoted to a succinct account of the past educational history of the Commonwealth. He pays the professional compliment to Ricky, of Holt, and Hickman, of Boone County, who were the active authors of the revised school law of 1853, under which the State had experienced so great a revival in popular education. In 1858 there were 4,916 school districts, 3,878 schoolhouses, 31 "colleges," 100 academies, 4,198 male and 855 female teachers, 367,248 children of school age, 159,941 attending school, \$580,767.50 paid to teachers, and \$107,599.76 to build and repair schoolhouses; total expenditure upon the school system, \$688,367.26.

Under the head of "Defects of the system" the earnest superintendent enlarges on—

First. The defects from the sparse population of portions of the State.

Second. The opposition and indifference of large numbers of people, who rely on the State distribution for a school of three or four months in the year. "Some of the schoolhouses are little better than a primeval log pen, with a horizontal gap on one side for a window and a vertical opening on the other for a door; without air in the summer and without light and warmth in the winter, in

which the children, perched upon high slab seats, spend a few months in the year in acquiring knowledge under difficulties; and with a broken door, it is not infrequently extemporized into a sheepfold or a pigsty during the long vacation."

He returns to the "old, old story" of the incompetence of the teachers, with a hearty compliment to the excellent public schools of the city of St. Louis, in the same State, and declares with emphasis that "the great and radical defect of our school system is the lack of well-qualified teachers to carry out its wise designs."

In view of the apathy of multitudes of people to the value of education, he quotes from the racy address of Hon. Henry A. Wise, of Virginia, to his constituents, setting forth the many absurdities that have been gathered about that familiar term "a self-educated man," and quotes largely from the most eminent Americans in support of education through schools and books. As a remedy, he calls attention to the publication of *The Missouri Educator*, a journal of education; suggests teachers' institutes, and quotes from Superintendent Powell, of Illinois; Draper, of Wisconsin, and Hon. Henry Barnard, of Connecticut, in support of his ideas of professional training for teachers. He enlarges on the importance of teachers' and common-school libraries and puts in a plea for the organization and management of the latter. The needs of the local and county commissioners are noted, and the failure of their futile and incompetent policy set forth. After twenty years, the school laws have been revised and re-revised into "a maze of casuistry and confusion," and the superintendent urges that no material further change be made. He urges the importance of the uniformity of text-books, and says: "If all the discarded schoolbooks of Missouri could be collected and sold at the price for which they were purchased, they would yield money enough to found a first-class college."

A bill was before the legislature for the establishment of a State normal school, with an appropriation of \$6,000, and the superintendent argues that the granting for the improvement of teachers of practically "the use of 2 per cent of the school money will make the remaining 98 per cent worth a great deal more than the whole of it is worth now." He says that the policy of establishing a normal school for every quarter of the State, where the people would furnish buildings and pupils, should be inaugurated. The State now has a population of 1,000,000; 5,000 teachers were required in 1859, and in ten years it is certain that 10,000 will be required for this service. He calls it "fooling" and "mischievous" to look to the private schools, colleges, and academies for this supply of instructors. "They will do just what they have been doing in this matter for years past, and that is pretty near nothing at all." The report closes with an eloquent and forcible appeal for this much-needed "new departure" in the interest of the better training of the children of the people.

It was fortunate for the State of Missouri that it followed the example of the New England States in retaining its State superintendent of education for a long term in office, in the case of Superintendent W. B. Starke. The State of Massachusetts during the past sixty years, since the first appearance of Horace Mann, has appointed only six men as secretaries of the board of education, including Mr. Mann and the present occupant of the office. Connecticut and Rhode Island can show even a better record of the continuous service of able men in this position. The Western and Southern States have suffered, and still do suffer greatly, from their habit of frequent change in their most important civil functionary, the term of four years in several of them being the utmost period of the administration of an official, too often nominated for political rather than educational considerations. At all events it is refreshing to open the record of 1861 in Missouri with the name of Starke still appearing on the pages of the stimulating document which his reports invariably were.

In the fourteenth report, January 15, 1861, the superintendent states that in 1860 \$667,314 were paid for the wages of 5,670 teachers—\$215,472 from State and

\$140,044 from township funds, \$60,500 from county funds, and the remainder by rate bills and the voluntary contributions of the people. In addition, \$184,308 had been raised by taxation to build and repair schoolhouses, making over \$850,000 expended for the instruction of 170,800 school children; but with this gratifying increase of school funds the superintendent is still haunted with the spectre of incompetency in the teaching force. He says: "It is fearful to reflect how few of this number have the intellectual and moral qualifications for this great work." He expatiates, with the breadth of view of a true statesmanship, on the value of the common-school system as the chief agency in training the children of great numbers of people now drifting into the State from all the nationalities, classes, and religions in the world into the great art of living together in the exercise of a true American citizenship, and dilates on the necessity of trained teachers to meet this important movement. His words read like a prophecy of the calamities that fell upon his State during the four subsequent years of civil war, when the people of every community were arrayed in contention over its final adhesion to or the repudiation of its union with the great Republic.

Indeed, the prophetic warnings of the wise and eloquent superintendent were scarcely uttered before the verification was at hand. The legislature of 1861 indorsed the cause of the Southern Confederacy, abolished the office of State superintendent of education, suspended the appropriation of the school funds and devoted them to the cause of civil war. A later movement of the loyal people of the State, in convention assembled, prevented this diversion of the school funds. The result of this was, in the year 1862, "the almost total suspension of the common schools all over the State, the disorganization of all civil affairs, and the fearful distraction pervading all classes." January 13, 1863, it is said, "in consequence of the war which has with unparalleled ferocity distracted the State for the last twenty months, the common schools are prostrated and broken up, the colleges have been converted into hospitals and schoolhouses into barracks, school teachers have laid down the ferule and taken up the sword, and parents have sent their children to learn war." It was not until 1864 that the legislature rallied and began over the great work of the training of young America. This educational revival in nation and State for the past thirty years is the most reliable pledge that whatever may happen hereafter the people of the United States in their own connection with each other "will not learn war any more."

In January, 1863, after the civil war had wrought its worst in the conflict that divided the people of Missouri, Mr. M. Oliver, secretary of state and ex-officio superintendent of schools, in the report already quoted from, remarks: "One of the surest ways of restoring and perpetuating peace, and of making things resume their former happy and prosperous appearance, is to be found in the organization and opening of schools in every neighborhood in the State." By act of the legislature, February 13, 1864, Secretary Oliver was ordered to resume the distribution of school funds. On the basis of the enumeration of children of school age, in 1860, he reported 385,649 between the ages of 5 and 20. The fund available for apportionment was \$169,685, and this was distributed at a ratio of 44 cents per capita. The secretary reports: "Nearly all the counties north of the Missouri River have their common schools in full operation, and in many counties south of the river (the disturbed region of the State) schools are opened, and daily more are in session." According to his statement, the war had cost Missouri nearly one-third her population of 1860. He urges with great force that "Nothing will promote a healthy immigration to the State like a system of common schools that is vigorous and effective. All immigrants, before leaving their old homes, who have the interest of their sons and daughters at heart, will always, other things being equal, select that county or locality where their children can be educated." He urges the reestablishment of the offices of State and county com-

missioner of education, which were abolished during the war period. The progress of the war, by 1864, had practically determined that the slave population of the entire South arrayed against the Union would be emancipated. Indeed, the proclamation of President Lincoln to that effect had already been issued. It was left to the five Southern States not in arms against the National Government, Maryland, Delaware, West Virginia, Kentucky, and Missouri, to dispose of their colored population in accordance with the almost universal convictions of the loyal States. The people of Missouri had called a convention that, early in 1865, would be expected to decide on this important subject. The secretary wisely places before the legislature the new obligations that will confront the State in several public matters dealing with the question of the civil status of the negro after emancipation. In any probable event, he urges the importance of elementary education, to prepare him for whatever condition he may be left in by the great act of deliverance from the chattel slavery that for forty-five years had, more than all other causes combined, retarded the progress of a Commonwealth so richly endowed by nature and so admirably placed for the occupation of man.

Here the present record may be suspended. In the year 1866 a new school law was passed by the legislature, more comprehensive and thoroughgoing than any previous statute, an event of sufficient importance to be regarded the inauguration of the new era of school-keeping, in which this great State has figured during the past thirty years with conspicuous energy and success. In 1866 a State teachers' convention was held in St. Louis and a committee was appointed to petition the general assembly for the establishment of a State normal school. The names appended to this document include Mr. T. A. Parker, State superintendent of education, and Mr. Ira Divol, well known for his connection with the public-school system of St. Louis. The chairman of the committee was Mr. William T. Harris.

It remains to notice the condition of public education in several of the large towns and cities which, at an early period, had received special appropriations of school lands from the National Government. These towns, by all legislation previous to 1860, were treated as separate school corporations, each in charge of its own board of school directors. In several of these, important movements had been made previous to the war, and the coming peace that set in motion the increasing tide of population from the open country to the large villages and cities imparted a remarkable energy to their educational affairs.

The city of St. Joseph, by a special act of the legislature in 1860, had established a system of public education. Its population was 10,000. Two small schoolhouses were erected and 6 teachers engaged for 360 pupils. The coming of the war suspended operations till 1864, when the work was again taken up with renewed vigor. Additional taxation was solicited and obtained from the legislature. Schoolhouses were built and seats provided for 1,000 pupils in all the departments of the graded system. The city in 1866 had risen to a population of 18,000 to 20,000, with 4,000 children of school age.

The city of Springfield had not moved for a municipal organization of schools in 1866. A large number of smaller places, some of them now important educational and social centers, at this time made their first effort at the local organization of their public graded-school systems.

The history of Missouri during this period culminates in the establishment of the public-school system of the city of St. Louis, the chief city of the State, and still the most populous and every way important city of the Union west of the Mississippi.

This deeply interesting history dates from the act of Congress in 1812, setting apart vacant lands in St. Louis and other towns in the Territory for school purposes. This act was supplemented in 1834 and 1831 by laws compelling individual claimants to prove titles within a specified time in four of the towns aforesaid.

The result of this legislation was that a residuum of the original grant of less than 50 acres was reserved to the city in 1874-75, valued at \$1,252,895, but for various reasons realizing the amount of only \$52,833.75.

The twenty years during which the city of St. Louis seriously undertook the tedious work of establishing its title to this munificent land grant, from 1813 until 1833, were chiefly spent in litigation over this disputed title. In 1833 a school board, entitled "The board of president and directors of the St. Louis public schools," was chartered by the legislature. Its chairman was the distinguished citizen, the Hon. Edward Bates, afterwards Attorney-General of the United States during the administration of President Lincoln. The usual popular, perhaps unavoidable, mistake was made of loaning the most valuable of the school lands for fifty years at an interest of 6 per cent, a transaction that for years deprived the city of the proper use of its great educational endowment. Ten years later, in 1845, the legislature was called upon for a more stringent statute to arrest what were suspected to be evidences of mismanagement in the administration of this important fund.

In 1836-37 the first public schoolhouse under this new dispensation was built, at an expense of \$3,500. Teachers were paid \$900 for males and \$500 for females. The board continued the building of schoolhouses from 1841 to 1850. But the meager income from the valuable landed estate of the city was a source of constant financial embarrassment. Up to 1851 the building of new schoolhouses was a constant source of contention. Indeed, the system was so unsatisfactory that in 1843 Dr. William G. Eliot, one of the most conspicuous workers in the upbuilding of all good things in St. Louis, replies to an inquiring friend from the East: "There is no public-school system in St. Louis. There are four public schools for boys and girls with 500 pupils; their management almost entirely left to the teachers, although nominally under a board of directors chosen by the people. Only \$4,000 income can be secured from the landed property. There were 80,000 people in St. Louis before there was anything done in behalf of popular instruction."

By 1854 the schools had so gained the favor of the people that several new buildings had been erected and a high school, with 70 pupils, had been organized. For a time the city had been deprived of the participation in the State educational fund, on account of its great prospective land endowment, but in the years of 1853 and 1854 this law was repealed. In 1848 Doctor Eliot led the first advance movement that has given the public schools of St. Louis their present celebrity by offering a resolution in the school board to the effect that a committee of three be appointed to petition the legislature for an amendment of the city charter, authorizing the laying a tax of one-tenth of 1 per cent on all the property of the city for the public schools. The doctor was appointed chairman of this committee, and largely owing to the wonderful energy, wisdom, and tact of Doctor Eliot in the educational and philanthropic affairs of the city, the petition was granted on condition that it should be confirmed by a popular vote. The city, by a unanimous vote, confirmed the act of amendment to the charter, and from that memorable day a new era dawned on the cause of popular education in that city.

The effect of the high school, for a long time moving in the usual grades, was gradually felt in the schools of the State. It supplied the need of the secondary education, until that time entirely in charge of private and denominational academies. The growth of the city was so rapid that the building of schoolhouses was continuous, and the schools suffered even for the lack of tenements for temporary occupation. It is claimed that the growth of the St. Louis school system has been a powerful influence on the great revival of public educational affairs through the State, especially in procuring the legislation of 1855, which appropriated 25 per cent of the entire revenue of the State government to public education. The Lancasterian system of instruction, that had prevailed at the opening

of the city schools, disappeared after the usual demonstration of its incompetence for the needs of an American community.

In 1857 the normal school of St. Louis was established, with Mr. Richard Edwards as principal. It had been so difficult to obtain competent teachers for the schools that in 1848 fifteen were brought from the East. Indeed, until a later date, the majority of the teachers in the public schools of Missouri were imported, and the State still held back from the establishment of a normal school, the plan for a department of pedagogy in the State university not having gone into effect. In 1857 the school interest scored a great point by the election of Mr. Ira Divol as successor of Mr. John N. Tice as city superintendent of schools, a position he held for several years with great and increasing usefulness. Superintendent Divol visited the different cities of the United States and reported the results of his investigations on his return. In consequence several important reforms were inaugurated in respect to the structure of schoolhouses and organization of the schools. In 1857 St. Louis had a population of 135,000, with a public-school population of 25,000, with only seating capacity in its buildings for 5,361. The city was full of children who were not in any school and the public demand for additional accommodations was rising to a clamor. By the payment of obligations due the city \$30,000 was invested in buildings and the old schoolhouses were repaired for the present occupancy. One of them, built in 1850, was named from Rev. Dr. William G. Eliot, the Eliot School.

The rapid progress of the schools was arrested by the breaking out of the civil war. The city of St. Louis, during the five years of its continuance—1861 to 1865—was the storm center of a great agitation, in which public opinion was divided, exasperated, and terribly tried by the military and civic operations that held the State to the Union and paralyzed the operations of the Confederate party in this important Commonwealth. At one period the schools of St. Louis were reduced to one-third of their former magnitude, and for two years they were impeded in this way. But the clearing of the political atmosphere and the abolition of the rate bill brought educational matters again to the front. A graded course of instruction was adopted in 1864; and in the same year the city tax for public education was one-tenth of 1 per cent; during 1865-66, two-tenths; in 1867, four-tenths; and from 1868 to 1875, six-tenths of 1 per cent on the entire valuation of the city.

It was at this time, when the cause of public education was becoming enveloped in the cloud of civil war that Mr. William T. Harris appeared in St. Louis as a teacher in the public schools. In 1860 he was appointed principal, and afterwards became superintendent of the public-school system of St. Louis. * * *

The history of the State University of Missouri, though established before the period of the civil war, properly belongs to the same period as that of the State normal schools, the years following the close of the war—1865 to 1900.

ARKANSAS.

In the year 1875 an excursion of editors, chiefly from the Western States, made a tour of the State of Arkansas. At the regulation banquet by which this class of the traveling public is usually entertained, a toast "The common-school system; without it the nation can not permanently prosper, with it the success of free institutions is placed beyond peradventure or doubt," drew from Mr. Edward Goodman, of Chicago, Ill., a striking object lesson, furnished by a comparison of the States of Arkansas and Michigan. Both these States were admitted to the Union in 1837. With a smaller physical area, a more severe climate, and a lower degree of fertility than its neighbor in the South, the State of Michigan, in the

forty years since its admission to the Republic, had become, in 1875, a powerful commonwealth, with a voting constituency of 221,000, a population of 1,250,000, of which 320,000 were children and youth of school age, and a taxable property valuation of \$272,000,000. The dense forests had been subdued, the original unhealthiness of the country had been overcome, and already the mining interest represented an annual outcome of \$15,000,000. In contrast, the State of Arkansas in 1870 polled less than 90,000 votes, with a population below 500,000, with less than 63,000 children in common schools, and the taxable property of the State less than half that of its modern sister. Meanwhile the vast mineral wealth of the State was still, as far as development was concerned, an unknown quantity.

The object of this speech was not to make an unfavorable comparison of these two States in the presence of the generous people who had welcomed their distinguished visitors with a true Southwestern hospitality. But the occasion furnished an admirable opportunity to enforce the vast importance of popular education in a new American State. The eloquent speaker continued: "The rapid advancement of Michigan is owing, first, to teeming immigration, and second, to her unsurpassed system of education. For years, while Arkansas lay in silence on the western banks of the Mississippi, comparatively unknown, the sons and daughters of New England were moving by hundreds and thousands to take possession of the beautiful prairie of the State of Michigan. At the very beginning they laid, deep and broad, the foundations of universal education. The result to-day is a schoolhouse in every school district, academies in every county, agricultural, normal, mechanical, theological, and other professional and industrial colleges through the State, and, above them all, the University of Michigan. What Michigan now is, Arkansas shall be, and more."

A visit to the capital of Arkansas, the beautiful city of Little Rock, and a true comparison of its present estate to that witnessed by the crowd of exploring editors twenty-five years ago, would reveal the potency of prophecy, when addressed to the great cause of popular education in this Republic. Perhaps no State of the South since that festival day, all conditions and circumstances considered, has done more for the education of its entire people than this commonwealth, that, until 1860, was regarded as almost on the border land of civilized America, and within the past twenty-five years has made such remarkable advances in popular education.

It was true that at the organization of the State in 1836 the duty to educate the people was recognized in the following clause of its constitution:

[*The Constitution of Arkansas, June 15, 1836.*]

ARTICLE VII.—Education.

SEC. 1. Knowledge and learning, generally diffused through a community, being essential to the preservation of a free government, and diffusing the opportunities and advantages of education through the various parts of the State being highly conducive to this end, it shall be the duty of the general assembly to provide by law for the improvement of such lands as are or hereafter may be granted by the United States to this State for the use of schools, and to apply any funds which may be raised from such lands or from any other source to the accomplishment of the object for which they are or may be intended. The general assembly shall from time to time pass such laws as shall be calculated to encourage intellectual, scientific, and agricultural improvement by allowing rewards and immunities for the promotion and improvement of arts, science, commerce, manufactures, and natural history, and countenance and encourage the principles of humanity, industry, and morality.

This section was included in the constitution of 1864-1865, as Article VIII, section 1.

The State of Arkansas, with an area of 52,138 square miles and 33,453,720 acres of land, had received from Congress 836,460 acres for common schools and 46,180

acres for a university. In 1840 the State had a population of 97,574. It has already been shown in a former essay of this series how this munificent donation was wasted by the reckless and careless handling that wrought havoc with so many of these large donations for the children. As late as 1854 the secretary of state, who was ex officio State commissioner of common schools, reported only 40 public schools, and complains of "the indifference that pervades the public mind on the subject of education." So complete had been the ruin of the original land grants of the nation that in 1870 the permanent income from this source was but \$35,192, while a careful administration of this patrimony would probably have yielded a State-school fund of \$2,000,000, possibly \$3,000,000. It was not till 1869 that the first public-school system for the State was established, and great additions have since been made to its efficacy by a score of able and zealous school officials, and the hearty cooperation of the legislature and people. More than half a million of dollars was expended for education in 1870, three-fifths from direct taxation. There were 70,000 children under instruction in 1870. But the process of raising a State from a long period of indifference to education is necessarily slow, and as late as 1870 there were 111,799 persons in the State unable to read and 133,339 who could not write. The new constitution of the State, of 1868, under the reconstruction government, contains an elaborate section providing for a complete system of popular education.

[Constitution of Arkansas, as amended in 1868.]

ARTICLE I—*Bill of rights.*

SEC. 23. Religion, morality, and knowledge being essential to good government, the general assembly shall pass suitable laws to protect every religious denomination in the peaceable enjoyment of its own mode of public worship; and to encourage schools and the means of instruction.

ARTICLE VI.—*Executive department.*

SEC. 1. The executive department of this State shall consist of * * * and superintendent of public instruction, all of whom shall hold their several offices for the term of four years and until their successors are elected and qualified. They shall be chosen by the qualified electors of this State, at the time and places of choosing the members of the general assembly.

SEC. 18. The * * * and superintendent of public instruction, shall severally reside, and keep all their public records, books, papers, and documents which may pertain to their respective offices, at the seat of government.

SEC. 19. The returns of every election for * * * and superintendent of public instruction, shall be sealed up and transmitted to the seat of government by the returning officers, and directed to the presiding officer of the senate, who, during the first week of the session, shall open and publish the same in presence of the members there assembled. The person having the highest number of votes shall be declared elected; but if two or more shall have the highest and equal number of votes for the same office one of them shall be chosen by a joint vote of both houses. Contested elections shall likewise be determined by both houses of the general assembly, in such manner as is or may hereafter be prescribed by law.

SEC. 21. The * * * and superintendent of public instruction, shall perform such duties as are now or may hereafter be prescribed by law.

SEC. 22. In case of the death, impeachment, removal from the State, or other disability of the * * * and superintendent of public instruction, the vacancies in their several offices thus occasioned shall be filled by appointment of the governor, which appointment shall be made for the unexpired terms of said offices, or until said disabilities are removed, or until elections are held to fill said vacancies.

SEC. 24. The officers of the executive department mentioned in this article shall, at stated times, receive for their services a compensation to be established by law, which shall not be diminished during the period for which they shall have been elected or appointed.

SEC. 25. The officers of the executive department and judges of the supreme court shall not be eligible, during the period for which they may be elected or appointed to their respective offices, to any position in the gift of the qualified electors or of the general assembly of this State.

ARTICLE IX.—*Education.*

SEC. 1. A general diffusion of knowledge and intelligence among all classes being essential to the preservation of the rights and liberties of the people, the general assembly shall establish and maintain a system of free schools for the gratuitous instruction of all persons in this State between the ages of 5 and 21 years, and the funds appropriated for the support of common schools shall be distributed to the several counties in proportion to the number of children and youths therein between the ages of 5 and 21 years, in such manner as shall be prescribed by law; but no religious or other sect or sects shall ever have any exclusive right to or control of any part of the school funds of this State.

SEC. 2. The supervision of public schools shall be vested in a superintendent of public instruction and such other officers as the general assembly shall provide. The superintendent of public instruction shall receive such salary and perform such duties as shall be prescribed by law.

SEC. 3. The general assembly shall establish and maintain a State university, with departments for instruction in teaching, agriculture, and the natural sciences, as soon as the public-school fund will permit.

SEC. 4. The proceeds of all lands that have been or hereafter may be granted by the United States to this State, and not otherwise appropriated by the United States or this State; also all moneys, stocks, bonds, lands, and other property now belonging to any fund for purposes of education; also the net proceeds of all sales of land and other property and effects that may accrue to this State by escheat, or from sales of estrays, or from unclaimed dividends or distributive shares of the estates of deceased persons, or from fines, penalties, or forfeitures; also any proceeds of the sales of public lands which may have been or may hereafter be paid over to this State (Congress consenting); also the grants, gifts, or devises that have been or hereafter may be made to this State and not otherwise appropriated by the terms of the grant, gift, or devise, shall be securely invested and sacredly preserved as a public-school fund, which shall be the common property of the State, the annual income of which fund, together with \$1 per capita, to be annually assessed on every male inhabitant of this State over the age of 21 years, and so much of the ordinary annual revenue of the State as may be necessary shall be faithfully appropriated for establishing and maintaining the free schools and the university in this article provided for, and for no other uses or purposes whatever.

SEC. 5. No part of the public-school fund shall be invested in the stocks or bonds or other obligations of any State or any county, city, town, or corporation. The stocks belonging to any school fund or university fund shall be sold in such manner and at such times as the general assembly shall prescribe, and the proceeds thereof and the proceeds of the sales of any lands or other property which now belongs or may hereafter belong to said school fund may be invested in the bonds of the United States.

SEC. 6. No township or school district shall receive any portion of the public-school fund unless a free school shall have been kept therein for not less than three months during the year for which distribution thereof is made. The general assembly shall require by law that every child of sufficient mental and physical ability shall attend the public schools during the period between the ages of 5 and 18 years for a term equivalent to three years, unless educated by other means.

SEC. 7. In case the public-school fund shall be insufficient to sustain a free school at least three months in every year in each school district in this State the general assembly shall provide by law for raising such deficiency by levying such tax upon all taxable property in each county, township, or school district as may be deemed proper.

SEC. 8. The general assembly shall, as far as it can be done without infringing upon vested rights, reduce all lands, moneys, or other property used or held for school purposes in the various counties of this State into the public-school fund herein provided for.

SEC. 9. Provision shall also be made by general law for raising such sum or sums of money by taxation or otherwise in each school district as may be necessary for the building and furnishing of a sufficient number of suitable schoolhouses for the accommodation of all the pupils within the limits of the several school districts.

ARTICLE X.—*Finance, taxation, public debt, and expenditure.*

SEC. 1. * * * The general assembly shall never levy a poll tax, excepting for school purposes.

SEC. 2. * * * Burying grounds, public schoolhouses, houses used exclusively for public worship, institutions of purely public charity, and public property used exclusively for any public purpose shall never be taxed.

SEC 15. The principal arising from the sale of all lands donated to the State for school purposes shall be paid into the treasury, and the State shall pay interest thereon for the support of schools at the rate of 6 per cent per annum.

In 1850 the census returns gave to Arkansas 3 "colleges," with 14 teachers and 150 students, with an annual income of \$3,100; 90 academies, with 126 teachers and 2,407 pupils, and an income of \$34,304, and 353 public schools, with 355 teachers and 8,493 pupils, with an annual income of \$68,411. The entire number attending school, as returned by families, was 23,350, with 16,817 white persons over 20 years of age unable to read. The population in 1850 was 209,897, with a school population of 40,000. In 1860 there were reported in the State 4 "colleges," with 225 students and an income of \$5,585; 727 public schools, with 19,342 pupils and \$120,613, of which \$13,356 was from public funds; 109 academies and other schools, with 4,415 pupils and \$58,146 income, of which \$8,645 was from public funds. At this date the population of the State was 324,143 white and 111,259 slaves and free colored, and 48 Indians, 435,450 in all, an increase of 107,000, 46 per cent, from 1850. The period from 1850 to 1860 was a time of great material prosperity—a six-fold increase in the short period of ten years. In 1860 there were 518 manufacturing establishments, with an annual product of \$2,850,578.

In 1866 Governor Murphy said: "No State in the Union is at present behind Arkansas in educational progress, and never in the history of the State have the people indicated a stronger demand for the establishment of a thorough system of common-school education at the public expense." With proper regard for the fervor of official rhetoric, it does appear that despite the wreck of the public-school funds at an early period the people by their own efforts had begun the good work of educating the white population in earnest by 1860. Fortunately the State was not to any great extent the theater of military operations during the civil war, and it emerged from the conflict in measurably good condition to move onward toward the encouraging state of affairs that now appears to prevail.

If the State of Arkansas, during the twenty-five years between its organization in 1836 and its secession from the Union in 1861, did not have a satisfactory system of public instruction it was from no lack of legislation upon educational affairs. The statute books are crowded with acts and amendments of acts looking to the building up of a complete system of common schools, not to speak of the frequent incorporation of academies. Indeed, at the first session of its legislature several of these academies were chartered, all, not excepting a parochial school, under the significant clause: "No preference shall at any time be given or any discrimination made in the choice of trustees, professors, instructors, instructresses, teachers, or students on account of religious sentiments, nor shall [any of these aforesaid officials] at any time make by-laws, ordinances, or regulations that may in any way interfere with or in any manner control the rights of conscience or the free exercise of religious opinion or worship." But in the case of one school and church two exceptions were made to this broad statement of religious liberty to the effect that "proselytes of abolition or Mormon doctrines shall be excluded from this seminary." The Antique Historical Society of Arkansas, at Little Rock, was chartered with the introduction: "Whereas that encouragement of learning and the dissemination of useful and entertaining knowledge are objects of vital importance to the people of the State," etc.

In 1838 the Government was authorized to sell what remained of the seminary lands (for the State University) and deposit their proceeds in the Bank of Arkansas until appropriated for the establishment of a university. In 1843 the legislature established a State board of education, consisting of the governor, president of senate, speaker of house of representatives, supreme judge of the State, and ten members of the general assembly, elected by ballot of the legislature, intrusted with full power to administer such a scheme of general education as the legislature might be disposed to set up. This was followed by the enactment of an

elaborate common-school law, sufficient, if it could have been enforced, to put and keep in school every child and youth in the State. The county court was authorized to appoint a commissioner to sell the school lands belonging to any district on request of its people and to order the election of three trustees who should have local control of the school established under this statute, to serve for two years. The land could be sold on a credit of ten years at not less than \$2 per acre, in 40-acre lots, the debt to be at interest at 8 per cent. The trustees could build a schoolhouse and hire a teacher able to instruct in orthography, writing, English grammar, geography, arithmetic, and good morals. The commissioner could buy school lots, or reserve 20 acres from the public domain for schoolhouse or cemetery lots. Only the interest of the school fund could be used for the support of schools, which were maintained chiefly by tuition fees of the pupils. The central board was to receive reports and set on its teachers the seal of certification that would reach every district in the State. A board of three commissioners, elected by the people, with the county clerk and judge, constituted a county board of education, which had the distribution of all school funds outside the sixteenth section originally granted, examined teachers, and visited schools once a year. The trustees could loan the funds at 6 per cent interest. The State was authorized at first to spend \$1,000, afterwards a more generous sum, \$1,515, to purchase books. All escheated lands, with the income of salt springs and other public properties, were devoted to the same fund. A portion of the surplus revenue received by the State was appropriated to the increase of the school fund. The townships were allowed to establish "laboring," probably industrial, schools.

In 1848 the university or seminary lands were diverted from their original purpose and distributed among the counties as a part of the common-school fund. At a later date the counties were authorized to build up academies, in connection with adequate subscriptions by the friends of secondary education. In 1850-51 a new turn of the legislative wheel placed the entire oversight of the public schools in the county court and put an elected commissioner in place of the local trustees, evidently with the hope that the interests of the schools would be better served by a small and responsible body of officials. Subsequent revision of the school laws, in 1853, provided for county commissioners or superintendents of schools, chosen for two years, whose duties were those ordinarily performed by those officials, and who were required to report every year to the secretary of state, on whom were imposed the duties of State superintendent of instruction.

But it was this very State official who in his report could name only forty schools, and complains of a general indifference to education among the people. It was evident, with the State law for this ruinous system of loaning to everybody who would agree to pay interest, with the fact that once out of the charge of the county commissioner there was no security for the handling of the funds, and the provision of a rate bill, that the system would not be adequate to the needs of a State one-third of which was always at the mercy of a rise in the Father of Waters, another area liable to frequent overflow, the great hill country of the west and southwest still a wilderness, the capital (Little Rock) as late as 1854 described by an English traveler as a village of 500 people without any feature of a political capital town, with a population of little more than 200,000 in 1850 and less than half a million in 1860, scattered over a vast area of 52,000 square miles, twice the extent of the State of New York. All this explains the partial failure of the State to educate its people. The "peculiar institution" held one-fourth its entire population in a bondage so relentless that in 1859 the State law forbade the emancipation of slaves and banished free negroes from the State. It was only after the baptism of fire through which the people passed during the four years of the civil war that this great border State righted itself and entered on a career of educational progress which in one short generation has made it an educational "object lesson" for all its neighboring States of the South.

TEXAS.

A year before Horace Mann, in Massachusetts, inaugurated the great revival of the American common school, at the close of the first half century of the Republic, a "far call" was heard from the new Republic of Texas in behalf of universal education, as then understood, below the line of $36^{\circ} 30'$, in the Union before 1860. In 1833, by a law of the newly established government in Mexico, in the States of Coahuila and Texas all children were to be trained in Catholic schools and taught to kneel reverentially before the altar of the Roman Catholic Church. Against this edict Stephen F. Austin, in the spirit of old Connecticut, one of his various abiding places on his eventful journey from the cradle to the source of his final distinction as a father of a new country, embodied the protest of the American community, then domiciled in Texas, in the significant words, "We want free schools for our children."

On this line the battle of universal education has been fought from the establishment of the Republic of Texas, in 1836, through the more than sixty years of the dramatic history of that remarkable State. We are not surprised to find in the declaration of independence of the province, in 1835, the following impeachment of the Mexican Government: "It has failed to establish a public system of education, although possessed of almost boundless resources in the public domain, and although it is an axiom of political science that unless a people are educated and enlightened it is idle to expect the continuance of civil liberty or the capacity of self-government."

The constitution of the Republic of Texas, 1836, declared, "It shall be the duty of Congress, as soon as circumstances will permit, to provide by law a general system of education." In 1839 the Republic inaugurated the generous and statesmanlike policy that has characterized this Commonwealth through all the mutations of its changeful history of consecrating a great domain of public lands to the cause of universal education. By this act the area of 3 leagues was granted to each county for establishing "a primary school or academy." This was equivalent to a grant for common schools, as every academy would, by the necessity of the population, include all white pupils from 6 to 16, afterwards declared the public school age. The natural result of this experience of ecclesiastical interference in public affairs under the Mexican rule appears in the provision of the constitution of 1836 that no minister of religion should be eligible to the presidency or to a seat in Congress.

In 1837 we find the first record of the long line of statutes for incorporating academies and colleges, which, by 1860, had filled the State with private and denominational schools, often a hindrance to development of a public-school system—a system here provided for on paper not only by the magnificent donation of public lands but by a succession of laws, either of which, if thoroughly enforced, would have placed Texas at an early date at the head of the common-school States of the South. These academies and colleges were chartered on the nonsectarian system, as far as the provision that the school should be open to pupils of every religious faith. In one the payment of \$10 entitles a member of the corporation to a vote on the election of school trustees of the town where the school is situated.

This policy of donating large tracts of land as a basis for a permanent school fund through frequent grants to academies, colleges, and literary institutions has resulted in sixty years in providing the great prospective endowment of the common school system of Texas. In 1839, in addition to the 3 leagues given to each county, 50 leagues were ordered to be surveyed by a commission appointed by the President for the endowment of two colleges in the eastern and western sections of the Republic. In 1841, 4 leagues of land were given to a college at Gonzales and for a hundred years the descendants of all the defenders of the Alamo fortress, in 1836, were to be entitled to free tuition in this institution. In the same year

the Austin Lyceum was chartered, under the presidency of Burnet. In 1844 Hermann's German University was chartered, with a stringent provision that no religious test should be exacted of any teacher in the school; that all professors should be able to use the English language, and no strong liquors should be sold within a mile of the college. A league of land was thrown in as "a nest egg" for a future endowment. Baylor University, at Waco, that has become one of the best known of the Baptist denominational schools of the State, was one of the last chartered by the Republic. Several of the more prominent cities of the State have realized a handsome sum from the sale of these lands, originally donated for "a primary school or academy."

In 1845-46 the Republic of Texas, after nine years of experience as a "lone star," was admitted to the Union, with the proviso that four additional States might be carved out of its enormous area of 274,356 square miles, thirty-four times the area of Massachusetts, larger than the united Commonwealths of New England, New York, New Jersey, Pennsylvania, Virginia, and Ohio. The original necessity for the multiplication of slave States no longer exists, but it is by no means improbable that the people of Texas will yet insist on this privilege of division. Settled as densely as Massachusetts, Texas would support a population of 40,000,000. The State has 750 miles of seacoast on the Gulf of Mexico, with rapidly developing capabilities for a foreign commerce that will drain the boundless region between the lower Mississippi valley and the great mountains. Its situation between the twenty-seventh and thirty-ninth degrees of latitude brings it abreast of Greece, Rome, Egypt, and Palestine.

The policy of donating school lands continued after its admission to the Union. In 1854 the State set apart \$2,000,000 of the \$10,000,000 received from the United States for a State school fund. In the same year the State donated a certain quantity of land to all chartered railroad corporations for every mile of road put in running order, with the proviso "that they shall survey and set apart at their own expense every alternate section for public free schools." In 1856 the same condition was annexed to an act donating public lands for the benefit of navigation on the rivers of the State. It is understood that on the admission of Texas the State was accorded the unusual privilege of retaining sole possession of its entire territory. In 1873, after the close of the civil war, the first legislature following the continued Federal occupation of the State emphasized this already generous policy by a donation of half the remaining public domain, 84,000,000 acres, to free schools. In 1877 it was asserted that the State of Texas was in possession of 70,000,000 acres of public school lands, valued at \$50,000,000. The extent of the school lands of this great Commonwealth exceeds the entire area of all the New England States. In addition even to this, at different times the legislature has voted one-tenth or one-fourth its entire revenue for schools, with a liberal provision for general and local taxation for education. In fact, though one of the least of the educational States in the Republic in 1846, Texas authorized the city of Galveston to impose a local tax of one-half of 1 per cent for free schools, and in 1848 an additional act provided for a system of public instruction in that city.

The first constitution of the new Commonwealth of Texas in 1845 contains the following:

[The constitution of Texas, December 24, 1845.¹]

ARTICLE X.—*Education.*

SEC. 1. A general diffusion of knowledge being essential to the preservation of the rights and liberties of the people, it shall be the duty of the legislature of this State to make suitable provision for the support and maintenance of public schools.

SEC. 2. The legislature shall, as early as practicable, establish free schools

¹ The constitution of the Republic of Texas, 1836, declared: "It shall be the duty of Congress, as soon as circumstance will permit, to provide by law a general system of education."

throughout the State, and shall furnish means for their support by taxation on property; and it shall be the duty of the legislature to set apart not less than one-tenth of the annual revenue of the State, derivable from taxation, as a perpetual fund, which fund shall be appropriated to the support of free public schools; and no law shall ever be made diverting said fund to any other use; and until such time as the legislature shall provide for the establishment of such schools in the several districts of the State, the fund thus created shall remain as a charge against the State, passed to the credit of the free common school fund.

SEC. 3. All public lands which have been heretofore, or which may hereafter be, granted for public schools to the various counties or other political divisions in this State shall not be alienated in fee, nor disposed of otherwise than by lease for a term not exceeding twenty years, in such manner as the legislature may direct.

SEC. 4. The several counties in this State which have not received their quantum of lands for the purposes of education shall be entitled to the same quantity heretofore appropriated by the Congress of the Republic of Texas to other counties.¹

This document, it will be seen, reaffirmed the determination of the State to educate its white children, approved the principle of State and local taxation for schools, appropriated one-tenth of the public revenue raised by taxation to the same object, secured the inviolability of the State school fund and provided that the original grant of lands by the Republic of Texas to the counties should be confirmed and extended to all the new counties organized in the Commonwealth. The population of the State in 1836 was 50,000; in 1850, 154,034 white, 58,161 slave, and 397 free negroes, total 212,592. There were then 130 organized counties in the State. Five hundred and twenty leagues, 2,302,560 acres, were set apart at the admission of the State to the Union for education.

But from the beginning a succession of hindrances, despite the liberal action of successive legislatures, wrought a practical nullification of the intent of the superior class, until the close of the civil war brought with it the possibility of the great educational success of the State during the past thirty-five years. These generous grants of the public domain were coupled with the proviso that the land should only be loaned for a limited term of years. At that period there was land "to burn" in Texas. And with such an opportunity to buy at a nominal price, even to shirk the payment of interest or to buy on long credit, with a final repudiation of the debt and the reversal of the property to the State, operations capable of being repeated through an entire lifetime, it can readily be seen that available funds for the establishment of universal education were not at hand. Besides the fact that in 1850 the entire white (the only school) population of Texas was but 154,000 (not more than one of the present first-class cities of the Union) scattered over an illimitable area, with no modern facilities for traveling, its vast prairies almost impassable during several of the school months of the year, explains the reason why the establishment of schools demanded in the declaration of independence was so long delayed. Meanwhile the local education of the people, grouped in little neighborhoods, separated by material and social barriers during the twenty-five years previous to the great war, was largely carried on by private and denominational agencies. Of course this multiplication of private and denominational "colleges" and academies gave to the people able to educate their children in this way the opportunity for the kind of schooling then regarded competent for the exigencies of private and public life. In this way there was furnished to the country the group of able and energetic public men sent to Washington and retained for the public service at home.

¹ An act of the Republic of Texas approved January 26, 1839, granted to each county 3 leagues of land for the purpose of establishing a primary school or academy. The lands were to be located in the county, if good lands could be found vacant, and they might be surveyed in any sized tracts of not less than 160 acres. If lands proper for this use did not exist in the county they might be surveyed upon any of the vacant lands of the Republic at the expense of the county.

The same act directed a tract of 50 leagues of land to be set apart for the establishment and endowment of two colleges or universities thereafter to be created, the cost of survey being paid by the general treasury.

By 1855 the school fund, as the result of all legislation, supplied an income of only \$128,668. In 1854 the first general school law was passed. It was an elective statute, containing among other provisions the following:

The chief justice and county commissioners of each county were made a county board of education, empowered to divide the county into practicable school districts, and call an election for three trustees, to serve one year in succession. To these officials was entrusted the general working of the schools. The school revenues of the State were to be distributed per capita among these districts by the State treasurer, who was appointed ex officio superintendent of public instruction, and by the county officials. The \$2,000,000 spoken of was made a special school fund, which at 5 per cent furnished an income of \$100,000. Each district was expected to furnish a schoolhouse before receiving its share of the public funds. The freedom of the schools was not yet established—there being a rate bill for all able to pay—especially for filling out the time, while one-tenth of the State revenue was largely appropriated to the free schooling of poor children. Any primary department of a college or academy could be made a public school and subsidized by public funds. Amendments of the law in 1853 provided that the English language should be taught in all schools. In 1856 a mischievous law authorized the loaning of the school funds to railroad corporations. While this probably did facilitate the development of a large portion of the State by more rapid transit, it turned out a wasteful use of the school funds, large amounts of which were lost by the collapse of many of these corporations.

In 1856 \$10,000 was appropriated for the establishment of a deaf and dumb asylum at Austin, and arrangements were made to locate 20,000 acres of university lands. For many years the State benevolent institutions at Austin were under the management of the Bakers—uncle and nephew—originally from Maine, but well known as eminent teachers in Massachusetts. In 1858 the county courts were authorized to appoint boards of examiners for teachers. The amendments to the laws of 1854 in 1853 abolished the trustees and local district system, and made the county courts the guardians of public-school interests, the teachers being instructed to report directly to them. A subsequent amendment of the law in 1853 endeavored to arrest the waste of the school funds from the indiscreet loans to railroad and other corporations, and added the entire income of the sales of all public lands to the school fund.

Besides this record of legislation, gathered from the statutes of the State, there are few reliable sources of information concerning the actual result of so much lawmaking and such full and statesmanlike provisions for universal education. Superintendent E. V. Whittaker, who served during the period of reconstruction, in 1868 reports as follows: "I have not been able to find any official statement or record of the progress of education in Texas under these various laws, nor of the number of schools and teachers. There seems to have been but little inspiration, discernment, or progress. The State treasurer in his report complains of the clerical remissness of the counties in furnishing data. In the year 1861, for instance, out of a total of 124 original counties but 12 of the county courts made their reports as required by law. While the State was disbursing upward of \$100,000 annually for the support of public education, no summary of facts and school statistics were published or preserved." The superintendent presents such "fragmentary data" as the following:

"In 1854-55 the State treasurer, ex officio State superintendent of schools, reports a disbursement for public education of \$27,137. In 1856, 72,826 scholars with \$101,538 expended, \$1.38 per capita. In 1857, 87,000 pupils, \$106,000 expended, \$1.21 per capita. In 1858, 102,772 children, \$105,855 disbursed, \$1.03 per capita. In 1859, 101,181 scholars, \$113,154 expended, \$1.12½ per capita. In 1860, 104,447 pupils, \$104,447 expended, \$1 per capita. In 1861, 105,200 children, \$65,224 distributed, 62 cents per capita."

That the statements made by the superintendent of schools referred to did not misrepresent the actual condition of common-school education in the State during the period from 1845 to 1860 is shown by a report of the State treasurer, James H. Raymond, ex officio superintendent of common schools, in 1855. He states that "there is no provision in the law of 1854 by which the ex officio superintendent is to be furnished with a particle of material to construct a report." His source of information is the reports of twenty-eight chief justices, "not one of whom has thoroughly complied with his demand for information." From the published communications of these justices we gain an insight into the condition of educational affairs that explains the reason for the ill success of the generous action of the legislature. Of twenty-one school districts in one county in 1854 only two, and in 1853 only three, elected trustees. The slender amount of the fund to be distributed, \$27,138 in all—less than \$1 per capita—is assigned as one reason for this neglect. Another county reports but one district organized: "Almost everyone in our county being able to educate his own children, but little interest is manifested in the common-school system." Another county reports in 1855: "There are no schools organized under the statute." The small sum to be received, the sparse population, the difficulty of getting schoolhouses, etc., are assigned. Others report: "Some neighborhoods have very good schools on their own hook." In another county only 2 of 35 districts are organized, the reason assigned being "ignorance of the law, which is believed to be too prolix." Others make a better showing. In one 6 of 10 districts, in another 18 of 37, are organized. But still another reports only 4 in 15, and only 2 trustees qualified. One flatly repudiates the duty to organize, and 2 assert that there is no money, and the negligence of officials is largely responsible for the failure.

The city of Galveston, for which a special school law had been passed, elected trustees, but nothing more was done. The lack of funds is alleged as a cause of the failure. Another county organized 10 of its 21 districts. The judge of another county reports: "The law is a failure." Other justices suggest the raising of a charity fund, with a small amount required for paying tuition for poor children. Many counties report that the courts have no interest in the matter. One unfortunate county declares that it has no schools, and none have been asked for in the county. The monotonous report still comes in, "But little interest; only few districts organized." Doubtless the sparse population of the majority of these counties was the chief hindrance. The plan of distributing State aid to private schools did not seem to occur to any of these writers. It can not be questioned that, according to the report of one county, "60 cents a year is of no use in educating a child." The number of school children returned in 1854, for 100 counties, was 41,198. The moneys unexpended were supposed to lie in the hands of the county authorities, and became the occasion of legislative acts and a great deal of litigation. All the judges report a desire among the people to educate their children. It is probable that there were at this date a fair number of colleges for the better-off class, and a portion of the teachers were schooled in the academies and colleges, which were but another name for schools for the instruction of all who came.

But while for this and numerous other causes the people of Texas during the twenty-five years previous to the breaking out of the civil war did not realize the opportunities for the education of their children that the fathers of the State and the acts of their legislatures seemed to provide, the original declaration of Austin—"The people desire free schools for their children"—has never been forgotten.

In the year 1861 the secession of the State of Texas from the Union caused the suspension of the public-school system during the war. The State school fund of \$2,592,533.14 before 1855 had suffered depletion to the extent of \$1,285,327. The railroads had all forfeited their charters and were generally regarded insolvent. In 1868 there was due from the State to the school fund the large sum of \$3,549,418.58. The superintendent reports: "So largely has this great endowment been depleted

that it is very doubtful whether in its present condition an annual income of \$30,000 can be realized from it for the maintenance of schools."

The constitution of 1866, prepared during the temporary revival of the State government under the policy of President Andrew Johnson, contains wise provisions for the reorganization of the school funds, not only requiring the recognition of the land grants to counties and the alternate sections of railroad lands, but adds one-half the proceeds from the sale of all public lands. It also provided for a State board of education and a State superintendent of public schools.

By one provision the counties should have authority to negative the sales of their lands by the boards of trustees. The explanation of this apparent invasion of local rights seems to be that previously large losses had been incurred by the local officials disposing of these valuable properties for "a song."

This constitutional provision, although only of temporary effect, is here quoted entire, as a proof that even through the dismal period of civil war the determination of the people of Texas to educate their children was never abandoned. No fact in the history of popular education in the United States is more impressive than the steady growth of a common school public, from its inauguration under the leadership of Thomas Jefferson in Virginia, even before the establishment of the National Union, through long years of varied success and failure, until it emerged into public view from the wreck of the civil war as the most vital element remaining in the demoralized civilization of the seceding States, at once putting itself in friendly relations with the similar body of people in the North, and during the short generation from 1870 to the present time achieving such results as under similar circumstances find no corresponding record in the annals of mankind in any age or land.

[Constitution of Texas, June 25, 1866.]

ARTICLE X.—*Education.*

SECTION 1. A general diffusion of knowledge being essential to the preservation of the rights and liberties of the people, it shall be the duty of the legislature of this State to make suitable provisions for the support and maintenance of public schools.

SEC. 2. The legislature shall, as early as practicable, establish a system of free schools throughout the State; and as a basis for the endowment and support of said system, all the funds, lands, and other property heretofore set apart and appropriated, or that may hereafter be set apart and appropriated, for the support and maintenance of public schools shall constitute the public school fund; and said fund and the income derived therefrom shall be a perpetual fund exclusively for the education of all the white scholastic (inhabitants) of this State, and no law shall ever be made appropriating said fund to any other use or purpose whatever. And until such time as the legislature shall provide for the establishment of such system of public schools in the State, the fund thus created and the income derived therefrom shall remain as a charge against the State, and be passed to the credit of the free common school fund.

SEC. 3. And all the alternate sections of land reserved by the State out of grants heretofore made, or that may hereafter be made, to railroad companies or other corporations of any nature whatever, for internal improvements, or for the development of the wealth and resources of the State, shall be set apart as a part of the perpetual school fund of the State (and the legislature shall hereafter appropriate one-half of the proceeds resulting from all sales of the public lands to the perpetual public-school fund): *Provided*, That if at any time hereafter any portion of the public domain of this State shall be sold, and by virtue of said sale the jurisdiction over said land shall be vested in the United States Government, in such event one-half of the proceeds derived from said sale shall become a part of the perpetual school fund of the State.

SEC. 4. The legislature shall provide from time to time for the sale of lands belonging to the perpetual public-school fund, upon such time and terms as it may deem expedient: *Provided*, That in cases of sale the preference shall be given to actual settlers: *And provided further*, That the legislature shall have no power to grant relief to purchasers by granting further time for payment, but shall, in all

cases, provide for the forfeiture of the land to the State for the benefit of a perpetual public-school fund, and that all interest accruing upon such sales shall be a part of the income belonging to the school fund and subject to appropriation annually for educational purposes.

SEC. 5. The legislature shall have no power to appropriate, or loan, or invest, except as follows, any part of the principal sum of the perpetual school fund for any purpose whatever, and it shall be the duty of the legislature to appropriate annually the income which may be derived from said fund for educational purposes, under such system as it may adopt, and it shall, from time to time, cause the principal sum now on hand and arising from the sales of land or from any other source to be invested in the bonds of the United States of America, or the bonds of the State of Texas, or such bonds as the State may guarantee.

SEC. 6. All public lands which have been heretofore or may be hereafter granted for public schools to the various counties or other political divisions in this State shall be under the control of the legislature and may be sold on such terms and under such regulations as the legislature shall by law prescribe, and the proceeds of the sale of said lands shall be added to the perpetual school fund of the State. But each county shall receive the full benefit of the interest arising from the proceeds of the sale of the lands granted to them respectively: *Provided*, That the lands already patented to the counties shall not be sold without the consent of such county or counties to which the lands may belong.

SEC. 7. The legislature may provide for the levying of a tax for educational purposes: *Provided*, The taxes levied shall be distributed from year to year as the same may be collected: *And provided*, That all the sums arising from said tax which may be collected from Africans or persons of African descent shall be exclusively appropriated for the maintenance of a system of public schools for Africans and their children, and it shall be the duty of the legislature to encourage schools among these people.

SEC. 8. The moneys and lands heretofore granted to, or which may hereafter be granted for, the endowment and support of one or more universities shall constitute a special fund for the maintenance of said universities, and until the university or universities are located and commenced the principal and the interest arising from the investment of the principal shall be invested in like manner and under the same restrictions as provided for the investment and control of the perpetual public-school fund in sections 4 and 5 in this article of the constitution, and the legislature shall have no power to appropriate the university fund for any other purpose than that of the maintenance of said universities, and the legislature shall at an early day make such provisions by law as will organize and put into operation the university.

SEC. 9. The 400,000 acres of land that have been surveyed and set apart under the provisions of the law approved August 30, A. D. 1856, for the benefit of a lunatic asylum, a deaf and dumb asylum, a blind asylum, and an orphan asylum, shall constitute a fund for the support of such institutions, one-fourth part of each, and the said sum shall never be directed to any other purpose. The said lands may be sold and the fund invested under the same rules and regulations as provided for the lands belonging to the school fund. The income of said fund only shall be applied to the support of such institutions, and until so applied shall be invested in the same manner as the principal.

SEC. 10. The governor, by and with the advice and consent of two-thirds of the senate, shall appoint an officer to be styled the superintendent of public instruction. His term of office shall be four years, and his annual salary shall not be less than \$2,000, payable at stated times. And the governor, comptroller, and superintendent of public education shall constitute a board to be styled a board of education, and shall have the general management and control of the perpetual school fund and common schools, under such regulations as the legislature may hereafter prescribe.

SEC. 11. The several counties in this State which have not received their quantum of the lands for the purposes of education shall be entitled to the same quantity heretofore appropriated by the congress of the Republic of Texas (and the State) to other counties. And the counties which have not had the lands to which they are entitled for educational purposes located shall have a right to contract for the location, surveying, and procuring the patents for said lands, and of paying for the same with any portion of said lands so patented, not to exceed one-fourth of the whole amount to be so located, surveyed, and patented, to be divided according to quantity, allowing to each part a fair proportion of land, water, and timber.

The brief period of reorganization under the Johnson administration afforded no opportunity for the reorganization of the school system. By 1868 the State found itself in the hands of the General Government during the period known as

the disturbed era of reconstruction. A State superintendent of instruction, acting under these conditions, as we have already shown, could do little but lick educational affairs somewhat into shape. It was stated by the authorities that the school fund of Texas was an imperial domain of 4,850,630 acres. At an established price of \$2 per acre it was estimated that the State could realize \$9,000,000. But the public lands of the State at this period had been so loaned that there was little left of value to save from the gigantic waste.

The sum obtained from one-fifth of the revenue of the State, with what could be realized from other sources, it was thought would set on the ground "a system of primary schools, suited to the peculiarities of our country and population, and place instruction within the reach of every child of whatever color, condition, or race."

The generous provision for the State University in 1839, 221,000 acres of land, reinforced in 1856 by \$100,000 in United States bonds, and one-tenth of the railroad lands, were set apart for the establishment of this institution. The lands had been offered for sale on a credit of twenty years and were sold for \$3.34 per acre. But of this sum \$379,168 was absorbed during the civil war. In 1868 there was left \$134,478 in Government paper. The cheering words of the State superintendent read not so much as an encouragement and warning to the 600,000 people of Texas as a prophecy of what the present Commonwealth has achieved during the thirty years since their utterance. He writes: "From this war we have emerged with changed purposes and an altered destiny. We are not the same people that we were, and we can never be the same. For us the task is set to place our Commonwealth in line with the nineteenth century, and to readjust the course of the ship of state for a new distant voyage. A civilization rehabilitated and enlightened by new ideas is our chief end, and the education in them our pressing duty. Let the Commonwealth, in its organized capacity, provide the bread of knowledge for all its children and labor to establish this method of public security. Let our motto be, 'Universal suffrage requires universal education.'"

Here is the proper halting place in this deeply interesting record of the educational history of one of the most characteristic States of the Union. During the first generation of thirty years the broad and generous ideals of the fathers of the new Republic and State had been promptly responded to by the very liberal action of the people, as represented in the legislature. But the difficulty was evidently at the point where these ample provisions and good intentions were to be organized in a working system of common schools for the children of the white race. When the superior class, acting on the educational lines of the Southern States from which they came, had supplied themselves with private family instruction, neighborhood, academical, and what were known in the South as collegiate schools, there was left too small a margin in this sparsely populated immensity of domain to assure any permanent success in organizing what was so little known and generally distrusted as the common school of the Northern States. The remaining thirty years of the history of popular education in Texas, when written, will be a story of another sort, a record perhaps as remarkable, in view of all the circumstances and environments of the case, as any that can be shown, either in our own or any other country in modern times.

CHAPTER XI.

COMMON SCHOOL EDUCATION IN THE SOUTH FROM THE BEGINNING OF THE CIVIL WAR TO 1870-1876.

EMBRACING THE PERIOD OF PREPARATION FOR UNIVERSAL EDUCATION IN THE
ELEVEN CONFEDERATE STATES DOWN TO THE RECOGNITION OF THE COMMON
SCHOOL SYSTEM IN THEIR REVISED CONSTITUTIONS DURING THE PERIOD OF
RECONSTRUCTION.

By A. D. MAYO, A. M., LL. D.

Contents.—Introductory.—Elementary schooling of the freedmen in Washington during the war.—Beginnings of education for the freedmen in Virginia.—The Government of the United States in the education of the freedmen.—The educational work of Gen. Rufus Saxton among the freedmen of the Department of the South; of Gen. John Eaton among the freedmen in the Mississippi Valley.—The inauguration of the common school system among the colored people of Louisiana, by Gen. N. P. Banks, 1863-64.—The Freedmen's bureau.—The Peabody education fund.—The mission schools established by the churches and people of the North.—The Hampton Normal and Agricultural Institute.

In several previous essays in the Reports of the United States Commissioner of Education an attempt has been made to present a historical record of the growth of popular education in the original fifteen Southern or slave States, from the appearance of the elaborate scheme for schooling the whole people, proposed by Thomas Jefferson as early as 1779, to the breaking out of the civil war in 1861. By reference to these publications it will be seen that, while these States had undeniably more than once been moved by the combination of the educated and the upward pressure of a section of the secondary class of their population to a periodical establishment of the people's common school for white children, it was only in a few of them that anything that could be regarded as such an arrangement existed in 1860.

In the new State of Missouri and the old Commonwealth of Kentucky a public school system had already been established, and in several of the principal villages and cities in other States a good foundation was laid for future growth. In North Carolina, where at that time no city of considerable proportions existed, even few villages containing 5,000 people, a public school system for white children and youth, under the general State superintendency of Rev. Calvin Wiley, had been maintained for several years. In Delaware, Maryland, Virginia, North Carolina, South Carolina, Tennessee, Kentucky, Georgia, Alabama, Mississippi, Louisiana, and Missouri, a State university or college foundation claiming this rank had been in operation for periods of various duration. But in the majority of these States, outside a few chief cities like Baltimore, Md.; Wilmington, Del.; Charleston, S. C.; Savannah, Ga.; Mobile, Ala.; New Orleans, La.; Nashville and Memphis, Tenn., and other less important places, the attempt to establish the common school for all

white youth had failed. All these States had again and again been stirred by agitation for a system of popular education, proceeding from a growing educational public under eminent leadership. Attempts had been made in several States, more than once repeated, to establish an arrangement for schooling the white population, more effective than the unreliable method by the "old field," family elementary, private and parochial school, and the various types of the academical seminary for the secondary grade. But, owing to causes fully referred to in these essays, these ventures had either failed entirely or, in the more numerous instances, fallen into partial collapse.

As the swift and troubled years drifted all these States toward the "dread arbitrament" of war, which was to determine the future of the American Union, these efforts were baffled by the growing estrangement from the North and a popular distrust of its most characteristic institution, the common school. In the cities already named the system of public instruction was often administered by teachers and superintendents from the great educational centers of the North; but the masses of the white people in these fifteen States were denied the enjoyment of a free or even a competent tuition public school. The illiteracy of the white population in these States has never been correctly estimated or even known at home.

That the superior class in these Southern States was found at the breaking out of the war in a condition of great executive efficiency for the prodigious work to which it had set its hands, and that the masses of the nonslaveholding people—probably four times as numerous—did add a luster to the American name by their bravery and persistence, their spirit of sacrifice, and the endurance of awful suffering in their devotion to their great leaders, is now a matter of history. It must never be forgotten that of all modern peoples the people of the United States is the one that has been least dependent on what can be learned from books and taught through the agency of schools for the development of a national character, for the very form of government, order of society, the condition and opportunities of industrial life, and experience in public affairs by all classes of white people in the United States during the long colonial and nearly a century of the national life had from the first been in itself a university more stimulating, disciplinary, and inspiring than had ever before existed.

Even the 5,000,000 negro slaves, on their emergence from the darkness and twilight of their condition into the common life of freedom, will be best understood in their relations to a republican civilization. Here, in contact with a superior class, through a period of more than two hundred years, this people underwent the most rapid and effectual transition, from the depths of pagan barbarism to the threshold of a Christian civilization, on record in the annals of mankind.

There was certainly found during the period of the great conflict and the subsequent years of reconstruction—a period of fifteen years that sorely tested the mental and executive capacity of the Southern people—no such evidence of incapacity in the prosecution of a gigantic war under the most tremendous difficulties and the rapid recovery from absolute defeat and industrial ruin as would remand the population of these States to the category of ignorance. In fact, there was not in 1860 a population of 10,000,000 in any country that could make a more notable display of all the qualities necessary to the prosecution of a great war and the administration of public affairs than in these fifteen American Commonwealths.

Although the contest through more than seventy-five years for universal education in these fifteen States had borne fruit and, in 1860, was represented by a larger and more influential public than ever before, yet the South in 1860 was strongly wedded to the British system of education of half a century before. It is probably true, as claimed, that a larger proportion of the white youth of the male sex were gathered in institutions bearing the name of college and university in this than in the Northern section of the Union in 1860. It is true that many of these seminaries were in no elevated sense of collegiate rank and, with a few

notable exceptions, the majority of them were not abreast of corresponding foundations of the higher education in the North. But the very absence of facilities for good common school education, both in its elementary and secondary departments, forced large numbers of pupils into schools above their capacity and compelled the colleges for both sexes to confine themselves largely to the work of what is now regarded a secondary grade. In 1860 the South was better furnished than the North with military schools. But the absence of any thorough system of education under public supervision and the consequent dearth of reliable statistical information makes all attempts to set forth with accuracy the real condition of Southern education in 1860 well nigh an impossibility.

But of all that was actually on the ground in 1860, whether understated or overstated by conflicting estimates, the greater portion had certainly gone the way of all Southern affairs in the disastrous wreck of the entire industrial and social order through the utter collapse of the Confederacy and the emancipation of the five or six millions of negro slaves in 1865. The attempt to recall the educational expedients to which even the leading families of the country were left during the four years of conflict is so baffled by the lack of reliable information that it is only by the putting together of fragments, pieced out by personal recollections, that any competent presentation can be made. It is certain that several of the State universities, especially of Virginia and North Carolina, besides a number of denominational colleges, were held in session until the final collapse. But a majority of the lower schools were closed at an early period. In portions of the country not disturbed by the ravages of war certain local schools were kept alive, although the terrible drain on the people for the support of extensive military operations and a paralysis of industry made it impossible to sustain the larger academical schools in anything like their usual condition. There was, doubtless, a considerable amount of teaching of young children in the homes from which, long before the closing campaign, almost every capable fighting man, often the entire population of competent age, had been drafted away. The annals of this, the most picturesque of modern wars, are lighted up by the accounts of whole regiments of soldiers in winter quarters, and even large numbers of Confederate soldiers in Northern prisons, being classed in school work.

In one notable instance a school was organized in a great prison camp in which a college professor resumed his old seat and laid the foundations of future scholarship in the more ambitious youths. In several of the cities which, like Mobile, Ala., remained until a late period in possession of the Confederacy, the public-school system was kept alive. In the State of North Carolina it is told that 60,000 children were held in school until the final occupation of the State by the advancing army of General Sherman. In the border cities like Baltimore, Wilmington, Louisville, and St. Louis, the schools remained in session, although half crippled by the constant drain on the resources of the people and by the inability of the country to endure a heavy taxation.

But it is interesting to note that, amid the excitements of the prodigious conflict, the more thoughtful men of the South were pondering the future educational needs of the Confederacy. A remarkable instance of this is a report by Prof. E. S. Joynes,¹ then of Hollins Institute, in Botetourt County, Va., one of the best of the class of the female seminaries, which had remained in session almost to the end of the war. Professor Joynes was, even then, one of the most distinguished of the scholars and educators of the Atlantic South. He had studied abroad and enjoyed the acquaintance of some of the foremost minds of that period. He doubtless represented a considerable body of the leading teachers of these States in his idea concerning the building up, at once on the declaration of peace and the establishment of the Confederate government, of a complete system of public instruction mod-

¹ Reprinted as Chap. XII of this Report.

eled on the Prussian schools. So engrossed was he and the management of the Hollins Institute with the vision of the coming nation, that it did not seem to occur to them that the Confederacy itself was already smitten with death and tottering to its fall.

On the day that the news of the capture of Atlanta by the army of General Sherman was received in Virginia, August 30, 1864, this admirable report of Professor Joynes was read to the trustees of Hollins Institute and a vote recorded to reorganize that institution as a great normal school, especially for the preparation of the large number of educated women of the superior families already reduced to poverty, for the profession of teaching in the new public schools for all classes of the white children and youth. Professor Joynes has lived to witness the realization of far more than he prophesied, under a restored and reconstructed Union.

The most notable characteristic of our great civil war, wherein it differed essentially from all previous similar conflicts of national importance, was that the process of upbuilding the new American in place of the destruction of the old-time local and provincial order of society went on from the opening guns at Fort Sumter in 1861 until the last State was relieved from military occupation and its affairs restored to the charge of its own citizens, in 1876. This radical process, though inevitably misunderstood by the people of the eleven seceding States and very imperfectly appreciated even by the majority of the military and civic officials who were often compelled to participate in it by a powerful and almost unconscious movement among the loyal people of both sections, was evident from the first to the more thoughtful observers of affairs.

First came the immediate cooperation of the friends of the Union with the National Government in the border States of Maryland, Delaware, Kentucky, Missouri, and the portion of Virginia which, by geographical position, had already become a portion of the Northwest. These five Commonwealths were held fast, not in any impossible attitude of armed neutrality, but in open and assured support of the national cause. Each contributed largely to the preservation of the Union in all patriotic ways and at a far greater sacrifice than the Northern States. The people of West Virginia had also to overcome the natural pride of citizenship of the Old Dominion, and all these States put behind them the sentiment of loyalty to the South that elsewhere almost annihilated the attachment to the Union. From these five States went forth not less than a quarter of a million of white and colored Union soldiers, the former not inferior to the best fighting material in the Union armies, and the latter, with a larger body that rose up to welcome the onward march of the Republic, to a considerable degree at least neutralizing the aid and comfort given to the Confederate cause by the work of the slaves at home and their services as laborers in the camp. It may, indeed, be regarded an open question whether the Union could have been preserved without the aid of this reinforcement of physical and moral power given by its Southern loyal contingent to the growing conviction that the war was only the beginning of a complete revolution in society through every State of the South. By no one was this important factor in the great problem appreciated so completely as by the President of the United States. Mr. Lincoln, by his nativity and the peculiar training of his entire younger manhood, was himself an illustrious representative of this portion of the country and, from the first, understood the vast importance of its cooperation in the mighty undertaking of bringing all the fifteen Southern States into line with the remainder of the Union. The other forces that wrought to the same end were military and civic, acting in another environment of circumstances, although, of course, dependent on the emancipation act for their opportunity. And even that momentous act would have gone South weighted with a doom of destruction had it not been anticipated and at once responded to by these movements coming in rapid succession during the ten years that followed the advent of peace. They were all the offspring of the same moral and religious conviction that in both sec-

tions of the Union, from the foundation of the Republic, had developed the agitation against the existence of negro slavery.

For half a century this movement had been held in check by the political and industrial interests of the North, so complicated in their relations with the slave power. It was everywhere stigmatized, even in the free States, as the destructive agitation of a party of religious fanatics and political impracticables. It was, in reality, the result of the moral convictions of the foremost mind and heart of our own and all civilized lands. But it was better understood in the South than elsewhere that, if permitted to go on unchecked, it would not only abolish negro slavery, but change the entire organization of Southern society from a belated British to the coming American type. It was for a full generation an educational and moral rather than a political movement, a steadily gathering protest wherever the influence of the slave power appeared.

But now that the great conflict for the preservation of the Republic had ended by the virtual destruction of the entire order of slave society, the more thoughtful Northern leaders of the old antislavery movement at once realized the perils of the situation; for the end came only by the extinction of all the vital forces of the Confederacy. Eleven great American Commonwealths, with a population of 10,000,000 white and 5,000,000 emancipated colored people, lay prostrate at the mercy of the nation, wielding a victorious army of 2,000,000 fighting men, under conditions open to all the terrible temptations of military and civic ambition which have wrought the ruin of the proudest nations in history. The problem now was to begin, at once, the work of reconstruction at the foundations of society; at first to prevent the vast region occupied and overrun by the armies from lapsing into anarchy or being stricken with a social paralysis. The old leading men of these districts during the war were away in the army or "refugeeing" within the lines of the Confederacy. The negroes, as fast as emancipated by the army, even before the edict of the Government, were in peril of becoming a dangerous element. Under the Confederacy they had the life of the women and children and largely the menial offices of the army at their disposal. Everything was to be done for the salvation of the Southern people while the Union army was steadily battering down the strong bulwarks of the powerful and aristocratic order of society that represented the convictions and achievements of the South for two centuries.

In steady succession, evolved from the profound conviction that the Union could only be saved when these States were not only conquered by arms but their people brought in line with the progressive ideals of society and government certain to prevail in the Republic, came up four movements which, emerging from partisan controversy, were finally everywhere regarded as the soul of all the successful life of the future in the new South.

First came the appearance of the Christian people of the North following the Army as an agency of peace and good will, as far as possible restoring, rebuilding, and placing on the ground abandoned by the Confederacy the beginnings of a characteristic American society. The dominant motive of that original body, which reached out a helping hand to the enemy, was not only patriotic but friendly and Christian. These people spent themselves in giving relief to the helpless of both races left behind the retiring Confederate armies. From this movement was developed the necessity of organizing the swarming multitudes of the negroes, left behind in a conquered territory, into some scheme of civilized society through legal marriage, free labor, and civil order. Of necessity there was next developed the attempt at the instruction of the freedmen in letters, which was the beginning of the wonderful educational revival which in less than forty years has established the American common school in its full significance through the immense territory of these sixteen States. In this great work the army officials and members of benevolent institutions cooperated in behalf of all who would accept the proffered aid. This primary educational movement reached its culmination in the placing

of a provision for universal education in the revised constitution of every State during the early period of reconstruction by the vote of its own people within ten years of the close of the war. In doing this it developed a system of public instruction that in itself created the public opinion which has taken up the work and borne it on to its present auspicious result.

Second. Next came the great benefaction of the educational fund of \$3,000,000 by George Peabody; as he declared, "A gift to the suffering South for the good of the Union." At the time this was the largest and beyond all others the most important contribution to the education of a whole people for a republican government by one man in the history of the world. Its donor was a native of the State of Massachusetts, for a time a resident in the South, and ultimately a distinguished and successful merchant and banker in London, never having transferred his American citizenship. This remarkable gift in a peculiar way represented the entire interest of Christendom in the most radical feature of society in the reconstructed slave States.

Third. In due time came the establishment of the national Bureau of Education. Originally it was one of the many fruitful ideas of Henry Barnard, the chief literary apostle of the great educational revival in the North from 1830 to 1860. The idea was taken up in an enlarged form in response to the educational exigencies of the time. Before this the National Government had only in one way shown especial interest in the fundamental enterprise of educating the American people for sovereign citizenship. By the great act of the Congress of the old Confederation, confirmed by the National Congress, a vast domain of the public lands had been consecrated to the schooling of the children and youth of all the States hereafter to be admitted to the Republic. By this act the Congress of the United States not only laid the foundation of the new American civilization beyond the Alleghenies, but put itself on perpetual record as the sponsor for the common school. Now, by the creation of the national Bureau of Education, the Congress of the reconstructed Republic established an organization that, for the first time, could distribute among all the States the knowledge of what was in operation at home and of what was best done abroad in all departments of education. To the South especially this was a benediction, for without it the schooling of its people would probably have longer gone on in the channels of the old-time British aristocratic methods which, until a short generation ago, left great masses of Englishmen an uneducated population. The national Bureau of Education has become, beyond question, the most effective public educational organization in Christendom, not only by its admirable work at home, but reaching out to every nation and distributing everywhere the best results of that wonderful movement which already has made our own the children's age.

Fourth. Largely owing to the influence of these powerful departures, we trace the attempt in the Congress of the United States from 1880 to 1890 to inaugurate a generous system of national aid to education, virtually for the relief of the South. Although finally defeated, for the first time in American history this movement brought the whole subject of popular education for debate before the Congress of the United States. The remarkable series of discussions in the Senate of the United States, which three times passed "the Blair bill," will stand in history as, in many ways, the most important manifestation of the higher political and educational sentiment of the South at that period since the close of the civil war. The last word has not been spoken or the last effort made in this direction. It has only to be demonstrated to the American people what is now well known to all competent educators, that several of these States have practically reached the limit of their financial ability to sufficiently protect themselves from the widespread and perilous illiteracy which has already become a national peril to awaken another effort, even more radical and of accepted wisdom, for elevating the quality of American citizenship among several millions of our people.

It was not by accident, or even in answer to imperious necessity, that these four movements were along educational lines. The American church is still so bound in the toils of ecclesiasticism and sectarianism that the majority of its vast and beneficent plans for the public benefit of the people are prejudiced by its perpetual internecine war of sects, creeds, and politics. But, happily, in our country the educational field is in no such way distributed off and preoccupied by rival classes and schools. Here was an opening into the very heart of the Confederacy and, through the schools, to the hearts of the children. Here could the wise and good men, and especially the wise and good women of every sect, church, party, and social class, unite to lift up the illiterate millions of this extensive realm to the condition of mental, moral, and industrial intelligence, without which these States would have forever remained a conquered province, hopeless of genuine union with the remainder of the country.

It would indeed have been "the crime of the ages" had the North and the nation left the system of Southern education on the ground in 1860 amid the rubbish of the general wreck of 1865. That system, until half a century ago, was the same that prevailed in England and in more than one of the older States of the Union. Its merit was that it did give to the more favored class everywhere the best schooling then in vogue, and was the most efficient element for its training in the executive capacity in public affairs, which is the stronghold of every great aristocracy. In fifteen States it did lift up to the almost supreme control of public affairs a class, probably in 1860 more powerful for evil or good than any similar body of "first people" in any land. Its destruction at the downfall of the Confederacy, if not followed by a broader and more rational system, would have been a calamity to these populations for which the people who saved the Union would have been left with no excuse before the great judgment-seat of history.

It was the instinctive realization of this, not only by leading educators, but by the intelligent people of all orders, including all the great historic leaders of the people through the whole war period, that brought forth in succession this series of movements and measures by the cooperation of the military, civic, religious, industrial, and educational forces of the Union, all converging upon the supreme enterprise of laying in these States the final and permanent foundation of the American in place of the old-time provincial and local order of society, which was essentially the reproduction of the British order of a century ago.

If, indeed, it is granted to the great departed of this world to overlook and rejoice at the long-delayed fruition of their earthly labors, we may well recall the enthusiastic exclamation in the correspondence of Thomas Jefferson and John Adams: "You and I will rejoice in heaven over the coming of the glorious day of the education of the whole people!" It was given to Thomas Jefferson in his lifetime to see only the upper story of his comprehensive scheme for the schooling of the children and youth of his native State in actual operation. The University of Virginia waited half a century before the people's right to universal education was assured by the establishment of the present system of common schools. It will be remembered that Jefferson's original plan included the emancipation and training of the young slaves for freedom; but the Virginia of the old dispensation only responded to her great educational statesman by a provision for the schooling of poor white children, so meager and unreliable that even the "lower orders" either rejected or remained indifferent to it. But from the beginning of the existence of Virginia as a State in the Union the agitation inaugurated by the group of eminent public men who first represented the cause went on with increasing momentum. The movement was represented by a remarkable school literature, frequent educational conventions, and occasional trials of strength in the legislature.

It was one of the significant and almost dramatic events with which the fifteen years of the civil war and the period of reconstruction were crowded that the Gov-

ernment of the United States took up the American idea of universal education as related to the colored race almost in the opening months of the conflict. After a brief period of uncertainty, during which several of the commanders of the Union armies indulged themselves in sending back escaping slaves to their masters, Gen. B. F. Butler cut the legal knot in the tangle by declaring the negro bondmen in the districts occupied by the Union force, "contraband of war."

General Butler arrived at Fortress Monroe, where he was intrusted with an extensive command, including Virginia and North Carolina, on May 23, 1861, scarcely a month after the firing on Fort Sumter, in Charleston Harbor. On the same day the State of Virginia practically seceded from the Union through the passage of an "ordinance of secession" by the convention called to decide that question, although the vote of the people indorsing this action came later. On the following day three negro slaves belonging to Colonel Mallory, in command of the handful of Confederate militia gathered to oppose the advance of the national forces, arrived in the Union camp. Their master was proposing to send his numerous family of colored people to Florida, and these intended to remain. General Butler at once declared them "contraband of war," put them at work, and informed President Lincoln that he had decided on this way of treating all similar comers. This policy, emphasized by its striking title, at once struck a responsive chord of sympathy in the loyal heart of the North and, not being forbidden by the Government, relieved the military authorities from the prodigious annoyance of acting as a vast police organization for enforcing the fugitive-slave law in what was declared by the Government "an enemy's country."

THE ELEMENTARY SCHOOLING OF THE FREEDMEN IN WASHINGTON, D. C., AND VICINITY DURING THE CIVIL WAR.

Even before the action of General Butler had borne any permanent results in educating the "contrabands," the first considerable movement for their instruction had been inaugurated in Washington, the capital city of the nation. One of the most unique spectacles for the immense crowd of loyal people from the Northern States which thronged the national capital from the beginning to the close of the civil war was the camps and schools of the colored "contrabands." At the first disturbance in Virginia beyond the Potomac River, the drift of the negroes, either from the estates abandoned by their seceding owners or escaping from slavery, overwhelmed the metropolis like a mighty flood. Common humanity demanded that these poor people, including whole families and neighborhoods, should be saved from starvation and disease and be made comfortable. At first they were "corralled" in abandoned buildings and barracks, or, through the warm season, in camps located in different parts of the city; one of the groups, in "Duff Green's Row," near the national Capitol. The great necessity of the Government for labor, and the presence of thousands of soldiers and strangers in and near the city, gave occupation to the able-bodied. But as it was the policy of the Confederates to carry away with them a large number of this class for work in the army, there was left a great throng of the old and sick, women and children, in the growing multitude.

Doubtless this spectacle of the actual slave population, even of Virginia, was a shock to many of the most zealous advocates of immediate emancipation, to whom the negro had been, from the violent contention over his rights and wrongs through long years, the most romantic figure of his time. The spectacle of miserable ignorance, half-pagan superstition, and often beastly vice, furnished by these great collections of unfortunates, while it appealed to the pity and charity of all, must have suggested, often for the first time, the tremendous problem of the emancipation and development of the 5,000,000 slaves, suddenly thrust upon the American people by the clearing away of the smoke of the first gun fired upon the flag at Fort Sumter in April, 1861.

But it is not in the nature or the habit of the American people to long stand appalled before any problem, however obscure, in the domain of material, moral, or spiritual affairs. The ready response of the benevolent soon relieved the destitute, and there was work enough for those who were able and willing. As soon as the question of support was settled there was a concerted movement upon these people, as on a newly discovered mission field, from all the ecclesiastical and educational agencies in the North. We must remember that for an entire generation, while the Northern people had been profoundly agitated, even wrought up to the point of making the nonextension of negro slavery the occasion for the formation of the new political party that elected Abraham Lincoln to the Presidency in 1860, it had been absolutely impossible to get at the millions of slaves in the South for any religious or educational purpose whatever.

It was a severe legal offense in nearly all the Southern States to teach a negro slave to read. The free negroes were banished from several States, and in the latter years of this period no minister or teacher could safely have gone South indorsed by any mission proposing the material, mental, moral, or industrial uplift of the slave. The only legal contact of the Northern people with the five or six millions of the race was the obligation to aid the master in hunting his fugitive, or, in defiance of an imperative law enforced by heavy penalties, help the fleeing bondman to escape across the Canadian border to the protection of the British Government. So it is not at all remarkable that on the appearance of a swarming contingent of "contrabands," as the escaping slaves were called by General Butler at Hampton, in the nation's capital, the grand army of the zealous philanthropic and charitable organizations and private recruits from all the loyal States should take up its line of march to inaugurate a genuine "campaign of education," the mighty work of training these new candidates for American citizenship. In this crusade they were assisted in the District of Columbia by an enterprising and courageous colony of the colored people who had already established schools for their own children: collecting together many teachers and laying the foundation of what has since become the most complete system for the education of the colored race in the country.

The American Tract Society seems to have been the first of the religious organizations to appear with a definite plan of work among the "contraband" camps. As early as March, 1862, a meeting was held, almost under the shadow of the Capitol, in Duff Green Row, by an agent of this society, aided by several clerks from the Government departments, to enlist 60 candidates for common schools. It is significant that on this first day these poor people enjoyed a double emancipation, not only from their estate of chattel slavery, but from that other intolerable yoke of bondage that still galls the neck of several millions of children of all races and conditions in the United States, the learning to read by the obsolete and absurd A B C method. This fortunate first class of 60 was taught to read by a skilled teacher, after the "word method," about that time being introduced into the best elementary schools of the country. The first lesson was drawn from the Bible, and it was a great triumph to the pupils to be able to "read a whole verse in half an hour."

This school increased in numbers from week to week. A lady expert in the new method of instruction became prominent. Dr. Lorenzo D. Johnson, a well-known and able citizen of Washington, then in private practice and afterwards a surgeon in the army hospitals, was placed at the head of the work, which had grown betimes, and conferred on its early workers a title of honor more grateful than any bestowed by institutions of learning.

It is unnecessary to repeat the long and interesting story of the rapid progress of this effort for the uplift of the poor and lowly, beginning with the war and in Washington and ending only with its transferral to the charge of the organized system of public education of all grades, supported by appropriations from Con-

gress and local taxation in 1867. An elaborate account of all this can be found in the nineteenth volume of Dr. Henry Barnard's *Journal of Education* for 1870, with other interesting material, covering 200 closely printed pages, giving a full and fair account of the original movement in Washington for the schooling of the colored people, encouraged by some of the foremost men of the country, until it became a vital department of the common-school system in every Southern State. All the religious denominations in the country, from the West and the North, during the years of the war came to the rescue, and with occasional aid from the Government and constant cooperation from the nation gave the movement a prodigious momentum. Gen. James Wadsworth, of New York, in charge of the forces at Washington, afterwards killed in the battle of the Wilderness, representing a family celebrated at home both for its great wealth and zeal in the cause of public education, found here a new and broad field for his favorite philanthropy. The most distinguished public officials were attracted by the spectacle of this experiment of planting the American order of society at the nation's capital, which a year before had been one of the most noted slave marts of the country. On the night of December 31, 1862, the entire population of these camps were found on their knees in prayer to welcome the stroke of the city clocks on January 1, 1863, that ushered in "the great, the important day, big with the fate" of millions of their people, the abolition of negro slavery in the Republic.

In June, 1863, a freedmen's village was established on Arlington Heights, opposite Washington, in Virginia, where 250 children, just from the plantations, were put forth as the nation's "awkward squad" in the elementary drill of the people's common school. At a later date the most noted slave-pen of the city was remodeled into a common schoolhouse for white pupils. Great numbers of the colored elders bent over their schoolbooks. As Gen. Rufus Saxton reported from South Carolina, the colored soldiers carried their spelling books in one hand while lying on the field of battle, under fire, clutching their muskets with the other hand. Eminent visitors to the capital and diplomatists from foreign lands were escorted through the contraband schools by the Secretary of State, Hon. William H. Seward, whose utterance ten years before, "the irrepressible conflict between freedom and slavery" was denounced by the leading New York press as "bloody and brutal." In 1863 there were 40,000 colored refugees in and about Washington, and some 3,000 under instruction. Rev. A. E. Newton, of Philadelphia, now appeared, and afterwards became an important worker in the building up of the final system of excellent public schools for colored children and youth in the capital city.

Nearly 20 different associations and organizations, besides a large number of private enterprises, are on record as engaged in this work in 1864-65, including, probably, 5,000 children and adults in religious and educational training. In the autumn of 1867 the management of these was withdrawn, as it was believed that the trustees of the public school system were able to deal with the entire colored population. A few of the mission schools still held on, and out of this movement has been developed a group of large and useful seminaries for the secondary professional and industrial education of colored youth. One of these, Howard University, still receives a considerable yearly appropriation from Congress in aid of its secular, industrial, normal, and medical departments. The account of this and similar institutions will be given farther on, in connection with the history of the Freedmen's Bureau and the subsequent establishment of the present public school system of Washington and the District of Columbia. It is estimated that \$160,000 had been expended by the various benevolent agencies for education in Washington during the four years until 1866. But this is doubtless a very inadequate estimate, for during these years few persons of any substance visited Washington without leaving a substantial token of their interest.

The United States Government did not at any time assume the direct support

or supervision of these schools, although in many indirect ways it gave aid and comfort to the work. It was not here, at the capital, but in the field of military operation on the Southern Atlantic and the Gulf coasts and in the valley of the Mississippi that the great movement in behalf of the development of the new freedmen into respectable citizenship was organized on a vast scale, including possibly a third of the entire colored population of the fifteen slave States in its direct and indirect influence and the expenditure of many millions of money. We now proceed to give a brief account of these important operations, of which there has been left a complete record in the great library of public documents and private pamphlets, which indicate the significance of these fundamental agencies in the establishment of the complete American system of universal education in all the original States of the South.

But as early as April, 1862, the Congress of the United States came to the rescue in the most practical way by the passage of an act requiring that "10 per cent of the taxes collected from persons of color in Washington and Georgetown be set apart for the purpose of establishing a system of primary schools for the education of colored children residing in these cities." The boards of trustees of these cities were made custodians of the funds thus collected and of private collections given in addition, although at first the public opinion of the white population of Washington did not especially favor this beginning of the education of colored children at public expense. The result was that the sum of \$736.86 only was collected in 1862 and 1863. This unjust and grossly inadequate method of compelling the most destitute class, the freedmen, to educate themselves was a failure from the beginning. After numerous attempts to prop up a bad system administered with no good will by the local trustees, Congress, under the leadership of Senator Patterson, of New Hampshire, who came into public life from a professorship at Dartmouth College, New Hampshire, and later, after a brilliant administration of the office of State superintendent of education in that State, returned to his alma mater, where he rendered important service, placed the support of the colored schools of the city and District on the just foundation of a share in all public school funds, divided according to the per capita of population.

Under this law the first public school for colored pupils in Washington was opened in March, 1864, in the Ebenezer Church. Miss Emma B. Brown was engaged as principal, at a salary of \$500 a year. The school began with 40 children and soon increased to 100. A year later the first public schoolhouse for colored children was erected by a donation from Connecticut of \$1,000. In 1867-68, when Congress finally placed the system on a working foundation, there were 41 schools, 25 under private and denominational religious control, with 3,000 pupils and 70 teachers. The colored population of the District of Columbia then was 55,000, making a school population, from 6 to 17, of 9,225. Of the entire population of the District of Columbia, including Alexandria, in 1860 (about 14,000), 3,244 were slaves and 783 free negroes. In 1860 there were 10,000 free negroes and 3,000 slaves in Washington. At first the teachers in the colored schools were chiefly white, but their places were taken as soon as suitable persons could be found of the colored race. The board of three trustees, two of them colored, was appointed by the city authorities. Subsequently the control of the colored schools for both races was assumed by a board of education, appointed by the Commissioners, in whose hands the entire administration of municipal affairs of Washington is placed. The Commissioners are appointed by the President of the United States, and all legislative power of the District resides in Congress. There were some 2,000 colored children in 1869 gathered in 40 public, church, night, and industrial schools in the cities of Washington and Georgetown.

In the District of Columbia, outside the two cities, an attempt to establish a system for colored schools was defeated by the adverse vote of the people. The women of the District entitled to the franchise generally acted with the majority.

In the region outside the two cities the progress of educational reform was similar to that already recorded, and the entire District was finally included in the public school system.

The famous negro mathematician and astronomer, Banneker, was born in 1739, at Ellicott Mills, Md., adjacent to the District of Columbia, of free parents. Prior to 1809 free people of color voted in that State. Banneker lived alone and unmarried in a cabin on his father's farm, became a profound student of his favorite sciences, and died in 1804 at the age of 72. For thirteen years he published an almanac. The first copy was sent in manuscript in 1791 to Thomas Jefferson, who sent a copy to the Academy of Sciences in Paris. Its publication greatly interested Mr. Pitt, Fox, Wilberforce, and other celebrated men abroad. Jefferson, in his reply to Banneker, reiterated his deliberate opinion on the capacity of the colored race for education, calling them "our colored brethren and fellow-citizens."

BEGINNINGS OF EDUCATION FOR THE FREEDMEN IN VIRGINIA.

It would seem like the "dispensation" of an overruling Providence that the land clouded by the shadow of the first slave ship, the coast of Virginia, on Hampton Roads, near the present city of Newport News, should also have become the scene of the opening act of emancipation by the mandate of Gen. B. F. Butler, who decided that the slaves who wandered into his camp at Hampton were "contraband of war." On September 17, 1861, not six months from the opening of the great civil conflict, Miss Mary S. Peake, a colored woman, opened a school for colored children, assisted by the American Missionary Association, which during more than forty years past has been such a potent agency in the training of superior colored youth for the leadership of their race. In 1862 five additional schools were set up at Norfolk and Newport News, one in the old court-house at Hampton, and one at Suffolk. The Boston Educational Commission, under the presidency of Governor John A. Andrew, aided in the fund which sent more than 70 teachers to the South. In 1863 the emancipation proclamation woke up the colored people of every age to reach out and up toward the elementary schooling in letters and intelligent industry which was the only assurance that the new freedom would be a blessing and not a curse to their people. A great crowd of teachers, many of them women of excellent attainments, high character, and assured social position, from all the Northern States and from the Dominion of Canada, went into the portions of the South that were in the possession of the Union armies. In Virginia many of the country houses of the "first families" in the seacoast district thus occupied were appropriated for this use. The mansion of Hon. Henry A. Wise, of Accomac County, one of the most zealous advocates of the common schools for white youths before the war, was among the number. There were no less than 50 of these schools in operation, including those held at night for adults. In the city of Norfolk not less than 1,200 pupils were taught by 15 colored instructors. The year 1864 saw the number of schools and teachers doubled. All these schools passed under the administration of the Freedmen's Bureau in 1865. They were supported by the contributions of churches, associations, and private benefactions, although the Government, through the Army, gave indirect aid.

The fall of Richmond and the collapse of the Confederacy in April, 1865, found the Freedmen's Bureau on the ground and the educational work was greatly aided during the five years of its operation. Gen. Samuel C. Armstrong, after the close of the war, was placed as an agent of the bureau in ten counties of eastern Virginia and there received the first training in the normal school of experience in the intimate dealing with the people of both races for the remarkable administration of the famous Hampton Normal and Industrial Institute, begun in 1868. It was only two years later that the State of Virginia launched her present system of free

common schools, the same year that the British Parliament, under the lead of Mr. Forster, put on the ground its present important system of public and secondary instruction. The Virginia system was thoroughly American, even in advance of the scheme of Thomas Jefferson proposed nearly one hundred years before.

The first public schools in Richmond, Va., were established by a group of ladies from Boston, Mass., as a commemoration of the coming of peace, and among the original school buildings was one erected for the manufacture of Confederate ammunition and another the home, during the four years of its existence, of Mr. Jefferson Davis, president of the Southern Confederacy. The first Southern State that moved in the establishment of a complete system of common schools, including the colored people, was West Virginia, in 1863. By this act the townships were authorized, under certain conditions, to establish free schools for colored children and youth.

In later times, however, at the national capital and on the coast of Virginia, the introduction of educational work for the negroes was largely by the initiation or under the direction of the missionary boards of the different churches in the Northern States. It was only gradually that Congress came to the aid of the work, although several of the commanders of the Union armies, by contributions of rations, transportation, and shelter, showed a deep interest therein. But gradually the growing interest of the country in the training of teachers wrought its effect at the capital, beginning with annual contributions to the schools and followed by appropriations that assured the success of the common schools of the District of Columbia. The effort culminated in the organization of the Freedmen's Bureau as a national institution in 1865. The movement continued during the period of reconstruction till 1876, when the public schooling of the children of the section, as always in the Northern States, passed under the control of their own people. But even to the present day the Government has occasionally extended aid by the donation of public property in several States.

THE GOVERNMENT OF THE UNITED STATES IN THE EDUCATION OF THE FREEDMEN.

But the education of the 5,000,000 negro slaves, emancipated by the triumph of the Union in the civil war from the condition of chattels to that of American citizens, required far more than instruction in letters, however important that might be. The two hundred and fifty years of slavery had indeed been in itself a great university, and the history of the world may be challenged to present a spectacle so remarkable as the growth of the pagan, often a bondman, African of three centuries ago into the American negro slave of 1860. Bad as the "peculiar institution" could not fail to be in its relation to the immediate political and social South and the Republic, it did afford the African pagan savage, often a slave at home, the great opportunity of a training in a republican order of society under an arrangement that assured active contact with the upper strata of white American citizens; secured him from the curse of the three furies of the prayer book—"sword, pestilence, and famine"—taught him to work, and enabled him to obtain, even in a crude state, the language and the religion of the most progressive of northern nations. In 1860 he already stood on the threshold of modern society. All his training had been American, and all his aspirations were in the direction of the higher American life.

But it was evident that the old-time system of missionary effort among the "heathen," even if supplemented by schooling in letters, was only a portion of what was needed to lift this race, even in a century, to its fit relations with American civilization. What Sir Bulwer Lytton, as a university student in England seventy-five years ago, declared essential to the education of the ignorant lower classes of Great Britain—that the parents should be educated into cooperation with the schooling of their children—was here of the first importance. It

was necessary that an organization sufficiently extensive and powerful to enforce the right notions of living should become the motive power of a grand movement to change the entire life of the freedman; first, to emancipate him from his bondage and insure him in the rights of a citizen, and then to place him in a condition where he could learn, not only to read the English language, but to gradually change his entire attitude to life itself, so that, sooner or later, he might acquire that habit of mental and moral self-control without which freedom would be always and everywhere a "glittering generality," a curse rather than a blessing, to any people of any race.

THE EDUCATIONAL WORK OF GEN. RUFUS SAXTON AMONG THE FREEDMEN OF
THE DEPARTMENT OF THE SOUTH.

The first attempt to deal with the colored people of the South, beyond Washington, in any large and decisive way along the lines of the American common school was made at Port Royal, S. C. Late in October, 1861, a naval expedition was sent to this, the most accessible seaport on the Southern Atlantic coast below Hampton Roads, and with it an army of 14,000 troops. The capture of the forts at Hilton Head opened up the entire neighboring region of the famous sea islands on the coast of South Carolina to the Union. At once the problem of dealing with the negroes in masses was forced upon Gen. Thomas West Sherman, in command. These islands were the headquarters of slavery on the South Atlantic coast. The extreme fertility and the production of a peculiar and superior quality of cotton had given them a world-wide reputation. Among their landed proprietors were owners of a thousand slaves. The sudden irruption of the Union forces on this paradise of the South had driven the white inhabitants away, leaving the standing crops in the fields and not less than 40,000 "contrabands" to be disposed of.

In this emergency General Sherman appointed Gen. Rufus Saxton to the entire administration of this, the most critical feature of the situation. The wisdom of this appointment was at once verified by the result. Rufus Saxton was born in the village of Deerfield, Mass., in 1824. He was the son of Jonathan A. Saxton, at the time editor of the *Greenfield Gazette*, the leading weekly newspaper of Franklin County. Soon after the family removed to the neighboring village of Deerfield, where the boy received all his elementary schooling in the celebrated Deerfield Academy, situated in an exquisite valley on the eastern verge of the Berkshire Hills, under the principalship of Mr. Luther B. Lincoln. He was graduated from the West Point Military Academy in 1849, at the age of 25, and at his graduation assigned to service in the artillery. For several years before the war he resided at West Point, as instructor in military tactics. He was appointed quartermaster of the fleet and army in the expedition to Port Royal, and it was in this capacity that he was called upon by General Sherman to face the problem of the disposal of the slave population before the proclamation of emancipation by President Abraham Lincoln in 1863.

The beginning of his administration was happily favored by circumstances. A crop of cotton, valued at many hundred thousand dollars, was awaiting the labor of the freedmen on the plantations of the sea islands. In the cultivation of these fertile lands was found the means of utilizing the labor of the negroes and meeting the large expense of supporting their families. Help from the North also at once flowed in. There was little confidence at first in military quarters in this experiment. The most discouraging predictions were made concerning the impossibility of working this great army of vagrant negroes. To undertake the formidable task of caring for and superintending such a body of disorganized people was to incur the coolness of friends, the social contempt of enemies, and the loss of caste in military society. But the young general came of a solid Puritan stock that was not appalled by the wrath, the contempt, or the indifference of man

when in the path of duty. For six months he kept his big brigade in order until, in May, 1862, relieved for service in northern Virginia. He returned in June, 1862, to the department, at first under the command of General Hunter, and remained until he was transferred to service on the coast and in the city of Charleston on the appearance on the coast of Gen. W. T. Sherman's army in 1865. On returning to Port Royal, in December, 1862, General Saxton received the following order from the Hon. Edwin M. Stanton, Secretary of War:

WAR DEPARTMENT,
Washington, D. C., April 29, 1862.

Brig. Gen. R. SAXTON.

SIR: You are assigned to duty in the Department of the South, to act under the orders of the Secretary of War. You are directed to take possession of all the plantations heretofore occupied by the rebels, and take charge of the inhabitants remaining thereon within the department or which the fortunes of war may hereafter bring into it, with authority to take such measures, make such rules and regulations for the cultivation of the land, and for the protection, employment, and government of the inhabitants, as circumstances may seem to require. The major-general commanding the Department of the South will be instructed to give you all the military aid necessary to enable you to carry out the views of the Government. You will have power to act upon the decisions of courts-martial which are called for the trial of persons not in the military service to the same extent that the commander of a department has over courts-martial called for the trial of soldiers in his department, and so far as the persons above described are concerned, you will also have a general control over the actions of the provost-marshal. It is expressly understood that so far as the persons and purposes herein specified are concerned, your action will be independent of that of the military authorities of the department and in all the cases subordinate only to the major-general commanding. In cases of actual suffering and destitution of the inhabitants, you are directed to issue such portion of the army ration and such articles of clothing as may be suitable to the habits and wants of the persons supplied, which articles will be furnished by the quartermaster and commissary of the Department of the South upon requisitions approved by yourself. It is expected that by encouraging industry, skill in the cultivation of the necessities of life, and general self-improvement, you will, so far as possible, promote the real well-being of all people under your supervision.

Medical and ordnance supplies will be furnished by the proper officers, which you will distribute and use according to your instructions.

Yours, very truly,

EDWIN M. STANTON,
Secretary of War.

P. S.—Report frequently, once a week at least.

Under these orders, as herein set forth, until the establishment of the Freedmen's Bureau, General Saxton administered the affairs of the colored people over a vast district, including the lowlands of South Carolina, Florida and, until 1866, Georgia. At the close of the war it was his opinion that the Government was indebted to the negroes for their labor during this period. Not less than \$2,000,000 worth of cotton and other crops had been harvested and, as in the similar operations in the Mississippi Valley under Col. John Eaton, jr., the colored contingent fairly paid its way. General Saxton was also called to organize, equip, and drill considerable bodies of negro troops, both for the protection of the district assigned to him and for aggressive operations, in which they gave a good account of themselves as soldiers.

The report of the first year's operations under the order of the Secretary of War by General Saxton, with the accompanying explanatory documents, at the distance of a generation reads more like a romance of history than a record of ordinary military affairs. Apart from the drafting of all the able-bodied negroes into four regiments, by orders from Washington, there was no alarm of war in the immediate vicinity of Port Royal, although when several of the islands and a portion of the coast were evacuated by General Hunter 4,000 destitute negroes were thrown on the hands of the military commander of the department. Many of the

superior slaves of the entire region had been removed by their masters on the appearance of the Union forces, and the average of the large colored population remaining were found to be inferior in intelligence, morality, and general efficiency. Shut off for generations from contact with white and the better sort of their own people, they had never gained a firm footing, and the romantic Southland had been virtually their prison house. There was a general conviction in this section of country that rice and cotton could never be grown by free labor. A considerable portion of the officers and soldiers of the Union Army of this department were not in sympathy with the idea of General Saxton and the Government that here should be tried an experiment in the self-support, education, and general right living of the freedmen which might at once become an object lesson to the country in demonstrating the wisdom of the actual emancipation which came on January 1, 1863. The orders and circulars of General Saxton bear frequent testimony to the difficulties of the position, and he had often occasion to remind the Government of the numerous hindrances thrown in his way, and the existence of practices and habits among the soldiery and irresponsible people, who beset the plantations and camps, that were a disgrace to civilization. But, in view of all that happened during that eventful year, the General declares his conviction concerning the freedmen that, "delivered from the impediments which have crushed them so long, with the same laws and institutions to govern and protect them in their rights as white men and the teaching necessary in their condition, the negroes will soon make rapid strides toward improvement. The elevation of the mass is sure, and the country may feel no apprehension regarding the future of the freedmen."

Under the administration of the Secretary of the Navy, a special agent, Mr. E. L. Pierce, had been sent to the region immediately on its capture and occupation to begin the work of planting and general cultivation among the abandoned negroes. The Secretary of the Treasury, Mr. Chase, had ordered that all the standing crops found on the island should be harvested and used for the benefit of the freedmen, and that they should be encouraged to labor by the payment of wages. Here was expressed the fundamental idea of a republican order of society, free labor under the protection of the United States Government. The uttermost efforts of General Saxton during this critical year were devoted to this end. The entire district of the sea islands and such of the adjacent coasts as were in possession of the Army was placed in charge of 3 division and 55 district superintendents, who were occupied with the working out of this problem of free labor, with the most careful regard to economy, the training of the blacks as "hired men," with the prospect of becoming themselves owners and freeholders of land. The Government aid and the distribution of the large private charities that came to hand was restricted to the absolute necessities of the case and aid withheld from those who would not work. The working people were assessed a small tax for the sick and destitute. Every effort was made to save these bewildered and too often immoral and unmanageable people from the perils of universal dependence on the Government and private charity which could have no result but the absolute pauperization of the negro race.

More than 10,000 acres of cotton and corn were put in crops and 16,000 people were thrown upon the commander for support and protection, including all that their masters, on abandoning their plantations, regarded unprofitable to carry away. This number was increased by 6,000 additional refugees from the territory evacuated by the general in command. The lateness of the first crop was the cause of serious danger. But the outcome of the first industrial experiment was \$50,000 secured from the cotton and the gathering of corn and other products; sufficient to support the entire population with some few contributions from army rations. The principal difficulty seems to have been the bad behavior of some of the soldiers and the indifference and opposition of certain officers to the success

of the undertaking. The freedmen, as a body, were amenable to order and more than justified the expectations of the commander and the country.

The second year opened with more than 10,000 acres of land under cultivation. General Saxton reports "enough has been done to demonstrate that the cotton fields of South Carolina can be successfully cultivated by free labor, that the negroes will work cheerfully and willingly with a reasonable prospect of reward, and that, as a race, they are eminently fitted to provide for themselves. Their wants are few and simple, they are exceedingly anxious to acquire property, are fond of the soil, and the idea that they may become owners fills them with delight."

Happily, the man endowed with the power to inaugurate and responsible for the success of this momentous experiment in freedom was by birth, training, and all the associations of his previous life, "the right man in the right place." He fully comprehended the fact, so long denied or doubted by too many in high places in those days, that the guaranty of the success of the people is that education which is the training of the head, the heart, and the hand for self-support and well-ordered American citizenship. He at once looked about for the means of furnishing instruction to the negroes of all ages who could be brought under its influence. As the Government had not yet assumed the responsibility for this, he put himself in connection with associations of citizens of Boston, New York, and Philadelphia, which, under the direction of the foremost people of their communities, entered heartily into the beginning of this greatest of benefactions to the emancipated people. At once schools were established throughout the entire department. Nearly 2,000 children were in regular attendance, and many of the teachers, coming from the North, were of the highest capacity for culture, character, and station in life. Among those appearing from Philadelphia were a brother and sister representing a family long distinguished in the antislavery work. The sister was soon promoted to the more responsible position of wife of the young military commander.

The General reports: "Experienced teachers report that the progress of the pupils does not compare unfavorably with that of children in the common schools North. They all manifest an intense desire to learn to read and seem to have the intuition that it is by means of education they are to rise in the scale of citizenship. During the planting and harvesting seasons it is a common sight to see groups of children going to school after having completed their tasks in the field. The Northern associations have sent down large numbers of experienced teachers and schoolbooks and thousands of dollars in valuable articles of clothing to be distributed."

Here was, for the first time on a large scale, laid the enduring foundations of the American common school in the slaveholding States, on the soil of the Commonwealth that first broke away from the Union, in the heart of the slave population, at the bottom of the colored "slough of despond." A hundred years before, Thomas Jefferson had seen in vision the possible emancipation of the negro and his preparation for extradition to Africa or freedom at home, by his elementary instruction in letters and industries, under the supervision of the State. The one characteristic of the American system of common schools is that it shall "reach from the gutter to the university." Through seventy-five years of the national life a common school public had grown up in all the States of the South; in no State more earnest and intelligent than in South Carolina. Several attempts had been made to establish an efficient system of common schools for the white race, but all had gone to wreck on the reef of "local option," by which it was left to the people of every district to accept or reject the system. Much of the money appropriated by the State had been used for paying tuition for the poor white classes in private and denominational schools. The city of Charleston was an exception, and at the breaking out of the war it had in operation a system of graded schools,

under the supervision of the Hon. C. J. Memminger, during the war secretary of the Confederate treasury. Several of the leading teachers came from the North, one of whom represented the State of South Carolina in the Senate of the United States during the period of reconstruction. But never in all these 15 States had the system "touched bottom" in any provision for the public schooling of the blacks; indeed, in several of the States it was a crime under the law to teach a negro. Here was, therefore, the real beginning of a scheme of literary and industrial instruction, established and superintended by the Government of the United States, and carried on by cooperation with the benevolent citizens of different States of the Union. There had already been sporadic attempts at the schooling of the negro by private, church, and missionary schools, but no movement covering an area so large, so extended in its administration, with result so gratifying as here. To Gen. Rufus Saxton must be awarded the great honor of inaugurating and, for several years, personally superintending this experiment, which was practically a test of the capacity of the emancipated race to meet the demands of the American system of free labor and free citizenship.

No words written by any public official during this period of the war were more effective in their expression of the spirit and intent of the great act of emancipation than these from the first report of General Saxton: "Our first duties were to provide for the immediate necessities of the freedmen; organize their labor and fit them to become self-sustaining; establish schools for all who had a desire to learn; to demonstrate to the world that which has been denied and disbelieved by the many, that the South could be cultivated by the labor of free people."

The superintendents appointed for the management of the plantations were all obliged to take the following oath:

I, believing that negro slavery is a great enemy to humanity, do solemnly swear that I will faithfully perform to the best of my ability my duty as superintendent of plantations in this department, and, as such, will use all the means in my power so to educate and elevate the people under my control as to fit them to enjoy the blessings of freedom; that to the best of my knowledge I will deal fairly and honestly with them, and respect, and cause all others under my jurisdiction to respect their rights; that I will not engage in trade with them for my own profit or appropriate any of the proceeds of their labor to my own personal advantage. So help me God.

For service in this laborious, most disheartening and often dangerous field of labor, the division superintendents received \$1,000, and the district agents \$600 per annum.

That these words were not the rhetoric of an extreme theorist or an appeal for popularity at home is shown by the reading of the entire sum of orders and circulars sent forth by General Saxton during the five years of his administration in the department. The details of the industrial operations were watched with sleepless regularity, and every avenue to abuse noted and carefully guarded. The hindrances from the lack of sympathy and cooperation in the army were often accompanied by jealousy and opposition in high places, although he was always sustained by President Lincoln and Secretary of War Stanton.

In August, 1862, under orders from Washington, all the able-bodied colored men in the department were enrolled in military organizations, the first regiment of colored soldiers being under the command of Col. T. W. Higginson, well known in literary and reform circles. The conduct of these soldiers in action, and the general labors that came to them, were appreciated, and their bravery demonstrated by the subsequent assault of Fort Wagner, and the death of their young commander, Col. Robert Shaw, was commemorated in an order of General Saxton. An important movement toward the ownership of land by the freedmen was the building of houses and the assignment of plats of 10 acres to each family that would undertake the labor of keeping it in cultivation. One cause of great embarrassment to the educational officials of the district was the sale, under the

law imposing a tax on the Southern States for the support of the war, of large portions of the plantation lands of the sea islands. These estates often fell into the hands of private owners, who were able to offer superior inducements to labor, and this, with the enrollment of all able-bodied men as soldiers, deprived the industrial development of great numbers of the most effective workmen.

But, after all these complications, the commander of this great college of industry and education "moved upon the enemy's works," the slough of ignorance, superstition, shiftlessness, vulgarity, and vice, in a manner to "come off conqueror and more than conqueror" in this first experiment. During this year the proclamation of emancipation had come, and January 1, 1863, witnessed such a jubilee as never before had waked the echoes of these mysterious islands of the sea. An order of the commander established the routine of general management, and a commissioner was appointed to deal with all the complications of the statute. Frequent circulars from headquarters not only indicated the duties of every class of subordinates but used every fit opportunity to convey some important advice to the excited and restless children of oppression, almost "dazzled with excess of light" by their sudden introduction to freedom. In the year 1863 the important step was taken by the Government of the United States to sell the lands of the sea islands in plots of 20 acres to the freedmen, the tracts not to exceed 320 acres to any private purchaser. Any family could locate on alternate sections, and by the payment of \$25, \$1.25 per acre, secure a home by paying for it by installments, one-fourth paid at first, with credit during three years. This privilege was also extended to discharged prisoners and soldiers of the army, and finally included a tract of 40 acres. A commission for dividing the profits was formed and a system of contracts for labor was established by which the rights of the laborers were protected. A savings bank was established in the town of Beaufort. The wages of the laborers were declared the first lien on the crops upon the private plantations, and all attempts at unfair dealings were brought under military inspection. All contracts for laborers were brought under examination at headquarters.

With all its failures, defects, and disappointments, it must be acknowledged, on a fair review, that the work done by Gen. Rufus Saxton and the supervisors and teachers during these first years of the occupation of the sea islands was not excelled in any of the military or civic departments elsewhere. It was watched with the most intense interest at home and abroad by all who appreciated the practical significance of this experiment of freedom to the negro and its result upon the South and the entire nation.

The second and final report of General Saxton previous to his retirement from the post of military commander of South Carolina, Florida, and Georgia was rendered in December, 1864. It is largely occupied with a statement of his administration of the important and difficult duties imposed upon him by the original order of President Lincoln, through the Secretary of War, in June, 1862. His understanding of the purpose of the President and War Department in establishing this arrangement is expressed in the following quotation from the order of Secretary Stanton: "It is expected that by encouraging industry, skill in the cultivation of the necessities of life, and general self-improvement you will, so far as possible, promote the real well being of the people under your supervision." His efforts to comply with this general direction, not only in the letter, but in the spirit of the President and his great Secretary of War, are detailed in this report, and the explanation of the apparent failure to realize more of the results fully set forth. Here, in the first general attempt on a large scale to deal with the complicated problem of the charge of the freedmen, the National Government drifted through a series of experiments and was embarrassed by conflicting conditions that might well make a complete success impossible.

It was evidently the desire of President Lincoln that here, in the very heart of

the old slave empire, should be fully tried the crucial experiment that was to determine the wisdom or unwisdom of emancipation. The idea included the training of the 15,000 negroes thrown upon the care of the army of occupation at Port Royal for the duties and responsibilities of freedom, by testing their capacity for free labor and the personal ownership and management of land, their ability to serve as soldiers, and their capacity to receive the instruction in letters and the Christian virtues essential to a self-supporting manhood and womanhood. In view of all these intentions in the working out of the problem, to General Saxton was assigned the command, with extraordinary powers. He was made directly responsible to the War Department, reporting to the President, as far as his own duties were concerned, not under the control of the military commander in chief of the Department of the South. In pursuance of what he understood by this arrangement, General Saxton seems to have proceeded during the first year's administration with confidence along a path beset with dangers and conflicts at every step with a success that warranted the most favorable anticipations for his colored constituency.

But it is easy to see by the light of subsequent experience that the position itself almost involved an impossibility. As it included both the organization of the negroes as laborers with a view to their becoming permanent occupants of the soil abandoned by their old masters, and as soldiers, it soon became apparent that a conflict of purpose would inevitably interfere with success. The army naturally claimed the services of these people in their old capacity of laborers and servants, to relieve the white soldiery, working in an untried climate, of all save actual fighting or purely military duties. The invitation to the negroes to enlist, with promise of fair pay, was carried out only in respect to the first regiment, and the arrangement was changed to a draft of all the able-bodied men, enforced by the most stringent military methods, while their pay was reduced and the occupation of General Saxton in the premises practically suspended. This policy to a great extent broke down the experiment of organized labor, as it left an area of more than 10,000 acres of cultivated land to be worked by the industrial incapables of the colony, the old and infirm, women, and children. The abandonment of a portion of the territory and coast threw several thousand of its people into the charge of the department, overwhelmed it with purely charitable work, and demoralized the industrial habits of the people.

At first the entire cultivated area of the islands was taken in charge of the new commander. General Saxton also, under an arrangement of supervisors of divisions and districts, established a strict and apparently workable system of cultivation that provided for the sale of cotton and the raising of provisions to relieve the Government from the financial expense of the experiment, give fair wages to the workmen, and support the schooling and clothing of the 15,000 freedmen. But this experiment was cut short by the action of Congress imposing a direct tax on all the seceding States for carrying on the war. Of course the forced sale of the sea islands was the only method of collecting the tax in South Carolina. So this entire body of valuable real estate was sold at auction and passed into the hands of private proprietors, completely upsetting the policy of the past year and dispensing with all the machinery for conducting the original experiment. A subsequent attempt was made to meet this exigency by inviting the negroes to purchase small homesteads, not exceeding 20 acres, sufficient land for a house and a small farm, enough to determine the ability for self-support. But this arrangement when completed was upset, and the land sold in quantities that made its purchase practically impossible for the freedmen. The numerous practical arrangements of General Saxton for the protection of the negroes against the greed of the new proprietors, with frequent interference of the soldiery and the constant perils that dogged the pathway of the contraband at every step out from his house of bondage, revealed the practical impossibility of his complying with these two adverse conditions.

The worst consequence of this reversal of policy was the almost complete loss of faith by the freedmen in the Army and the white man. Disappointed and baffled at every attempt to carry out the policy of the President, and practically impotent to arrest the downward rush of affairs, General Saxton placed his resignation in the hands of the Secretary of War, and was relieved from his special duties as at first outlined. The result of this change, and the secret history of the relation of the negro race in South Carolina to the Government of the United States during the period of reconstruction, it is not in the line of this essay, save in the educational field, to place on record.

But according to this report the one feature of the policy that seemed an exception to this general experience of disappointment was the schooling of the negro children and youth. Under a special arrangement with the missionary and other organizations in New York, New England, and Philadelphia, more than 100 teachers, many of them not only professionally skillful, but often of superior culture, Christian and social standing at home, were sent to Port Royal. While the small salaries of the instructors were paid at home, the Government, through General Saxton, provided shelter, transportation, and army rations, and assumed the general direction and supervision of this most interesting experiment. Several thousand of the children and adults of the freedmen were instructed, and the ability of the negro to receive education, as far as related to the elements of learning, was vindicated.

It is not necessary here to pass judgment on the complications of the different portions of this conflict that, like a blinding sea mist charged with a malignant malaria, rose and obscured the entire landscape of the situation. It was not strange that an attempt to do full justice to the freedmen by protection against the oncoming of the host of greedy adventurers that followed on the heels of the army to profit by every opportunity should have failed somewhat of success. All subsequent attempts to define the personal rights of the negro to the land were fated to come to naught, by the final policy of the Government, on the return of the Southern people to their old possessions. Indeed, the experiment at the sea islands was swamped in the changes of policy that ensued from the condition of political opposition in the North and the furious war of politics that followed hard on the close of the conflict of the armies. But it can be understood how, amid the tremendous exigencies of military operations, the work of the destruction of the Confederate armies was preliminary to everything else, since everything depended on the triumph of the Union cause. It was natural that the purely military man, intent on his own side of the great business, might easily become impatient and unjust to the man of broad ideas and Christian philanthropy who looked beyond the present, absorbed in laying the foundation of a new civilization for these people still wandering in the wilderness, not yet in sight of the promised land.

But it is a great tribute to the intelligence and Christian manhood of the noble leader of this first great experiment by the Government of the United States to plant the new American civilization even among the swamps of the South Carolina sea islands and coast, that in the closing words of his report he sums up his conclusions on the general theme in the following hopeful and prophetic words:

The experiment with the freedmen in this department is a success. Amid all their obstructions and in spite of all they have made constant progress and proved their right to be received into the full communion of freemen. They have shown that they can appreciate freedom as the highest boon; that they will be industrious and provident, with the same incitements which stimulate the industry of other men in free societies; that they understand the value of property and are eager for its acquisition, especially of land; that they can conduct their private affairs with sagacity, prudence, and success; that they are not ignorant from natural incapacity, but from the brutishness of their former condition: that they are intelligent, eager, and apt to acquire knowledge of letters; docile and receptive pupils; that they aspire to and adopt, as fast as means and opportunity admit, the social forms and habits of civilization; that they quickly get rid of in freedom

the faults and vices generated by slavery, and in truthfulness, fidelity, and honesty may be compared favorably with men of another color in conditions less unfavorable for the development of those qualities; that they are remarkably susceptible of religious emotions and in the inspirations of music; that, in short, they are endowed with all the instincts, passions, affections, sensibilities, powers, aspirations, and possibilities which are the common attributes of human nature. They have conquered a recognition of their manhood and right to be free, and vindicated the wisdom of your first order, to place arms in their hands, which I had the honor of receiving and executing. The senseless prejudices and bitter contempt against their race are disappearing before their peaceful and orderly conduct under their trials and provocations, their patient hope and heroism in war. Events for four years have been disciplining the mind of the nation to prepare it to give them full recognition and ample justice.

In this view it may be that the obstacles which beset their earlier path toward freedom were blessings, normal elements for the solution of the great problem of their manhood and their rights, as the atrocities and diabolisms, the murders and martyrdoms, the countless sacrifice of noblest lives in the war, may have been necessary to convince the American people of the utter and undeniable barbarism of slavery, and to inspire them with a determined purpose to build themselves up into a new nation and a new union upon the enduring foundation of justice, freedom, and equal rights of all men.

By the swiftly changing fortunes of the war, General Saxton emerged from the special labors and confusion of his original command to a position of even greater responsibility, with more satisfaction to himself. On arriving at Savannah, Ga., at the end of his famous "march to the sea," on January 16, 1865, Gen. William T. Sherman issued an order concerning the sea islands from Charleston south, the abandoned rice fields along the rivers, for 30 miles back from the sea, and the country bordering the St. Johns River in Florida, for the settlement of the negroes already made free by the act of war and the President's proclamation. This wholesale disposal of a territory larger than several of the older States of the Union to the freedmen was almost compelled by the fact that 40,000 of these destitute people were swept down to the seacoast by this tremendous march that thundered like a cyclone from Atlanta to Savannah. This extensive region was given absolutely to the colored people, and their able-bodied men were encouraged to enlist in the military service for their own defense. For the execution of this remarkable order General Saxton was appointed "inspector of settlements and plantations."

Here was a condition even more appalling than his original position of military commander. But soon after he engaged in this work he was appointed to the position of assistant commissioner of the Freedmen's Bureau for South Carolina and Georgia. On March 3, 1865, only a month before the general collapse of the Confederacy, Congress passed the act establishing this important bureau. At first the General had in charge the entire States of South Carolina, Florida, and Georgia. But in due time he was relieved from duty in Florida and Georgia and his oversight limited to South Carolina. His operations in this work will be noted in the general account of the Freedmen's Bureau, at a later period.

THE ADMINISTRATION OF GEN. JOHN EATON, JR., IN THE EDUCATION OF THE FREEDMEN IN THE VALLEY OF THE MISSISSIPPI.

A year later than the events already recorded on the Atlantic coast we shall see the Government of the United States engaged in an even more extended scheme, in the work of laying the foundations of the original plan of Thomas Jefferson, in the establishment of the common school in all its departments, among the freedmen of the Mississippi Valley and the Southwest. Almost a hundred years before, the Congress of the Confederation, followed by the first Congress of the Union, had responded to the act of Virginia, which ceded to the Republic her title in the larger portion of the region included in the five original States of the Northwest, by the magnificent donation of one thirty-sixth of all the public lands for the education of the children and youth of the coming millions of people that occupy

what is now the center of our seventy millions of population. Now, in 1861, the Republic returned to the good work so long suspended, and, through the authority of the military commanders down the entire coast line from Washington to Florida, laid the foundations in the soil first trodden by the feet of the bondmen of the vast and beneficent system of common schools for the whole people, under which more than 5,000,000 of children and youth are now instructed at the expense and under the supervision of every Southern State and Southwestern Territory.

But, as has been seen, at this early date, this act of the Government was supplemented and to a great extent supported by the efforts of the missionary bodies of the different Northern churches, benevolent organizations, and private workers in a field so novel and interesting. But it was left for the most notable educational feature of the war, like so much then originating in the country, to date from the valley of the Mississippi, and to find its originator in the great commander who brought the four years' conflict to an end on the soil of Virginia.

During the first two years of the civil war, until the spring of 1863, the operations of the Union armies in the States of Kentucky and Missouri, which still remained within the Union, prevented the extreme complication with the negro question which had at once appeared on the occupation of the coast of Virginia by the army of the East. There had been the same advance of the church missions and teachers, with the toleration of the military commanders, in the wake of the armies of the Tennessee and Cumberland, southward, as along the eastern coast, and already a great deal of the preliminary work of charity and instruction had been inaugurated. A leading book publication house in Cincinnati, Ohio, on the occupation of Nashville, Tenn., by the Union forces, is reported to have sent several thousand dollars' worth of schoolbooks gratis for the use of the negroes and poorer white people, and the wild expectations of the colored folk before the act of emancipation had been awakened by the idea that the knowledge of books was the key to the superiority of the dominant race.

But the first overland movement of the army of General Grant through southern Tennessee and northern Mississippi upon Vicksburg, following the desperate battle at Corinth, in the autumn of 1863, found the headquarters of the army of the Tennessee at Lagrange, a village in the southwest corner of that State, while the base of supplies for the advancing army was located at Holly Springs, Miss. A brigade of Ohio and Missouri troops, stationed at Grand Junction, Miss., a few miles from Lagrange, was commanded by Col. J. W. Fuller, of the Twenty-seventh Ohio Infantry. Its chaplain was Rev. John Eaton, jr., who, by the exigencies of war, was performing the duties of chaplain of the brigade. The route of the advancing army was through a region densely populated by negroes, and the appearance of the force of some 35,000 was the signal for the abandonment of the cotton plantations, with their growing crops, by their owners and a rush of the colored hosts upon the camps which at once threatened to become more perilous than any danger from the Confederate armies in front. This condition is thus described in the forcible language of Chaplain Eaton:

A slave population, springing from antecedent barbarism, rising up and leaving its bondage of centuries, and its local tendencies and associations surrounding the boasted influences and attractions of the master, in rags or silks, feet shod or bleeding, individually or in families, and pushing toward our armies. Their comings were like the arrival of cities. Often they met prejudices against their color more bitter than they had left behind. There was no Moses to lead, no plan in this exodus. The decision of their instinct or unlettered reason brought them to us. * * * They gave information for the guidance of campaigns, laborers for the various staff duties, took upon themselves all the serving of the Army for officers, hospitals, etc., and soon were accepted as capable of the soldier's discipline and endurance in all arms of the service and worthy of the soldiers' pay and honor. Out of those who came within our lines, probably not less than 80,000 have either died in the United States service or are still in it as laborers or soldiers. But there was a background to this sublime march of events. Ignorance, perverted ideas in taking liberty for idleness, including all the fostered vices and crimes of the old

system; cringing deceit, theft, absence of chastity, and the sundering of the family relations; tatters, nakedness, torn limbs, women in travail, helpless childhood, age and decrepitude, multiplied sickness and frequent death. The sublime dash and roar of the surge could not conceal the wreck or drown the piercing cry of distress. The Army shared its own food, shelter, and clothing. Charity, gathering in its small rills from the loyal mountains and villages, came faster in a full, gushing stream, bearing gifts and material. The laws of Congress had freed some; the proclamation all. The law of the Army—here the only expression of the law of the land—began to declare itself in behalf of the blacks. * * * The Army did all that was done to free, feed, shelter, protect, and give the negroes medical attendants, and furnished the only safe channel for the benevolence that came to its aid, added to protection, transportation, rations, and quarters, * * * it sought out of its forms of administering justice an adaptation to the peculiar condition.

Here was the appalling condition that confronted the commander of the American forces in northern Mississippi in the autumn of 1862, so different from any of the elaborate theories with which the enthusiastic antislavery public of the nation had been accustomed to entertain the country and Christendom during the long generation of agitation that preceded the war. Now had come in, as with the voice of a tempest, the era of experiment and education; and like an advancing host caught in a tropical hurricane, the Army of the Tennessee found itself arrested, besieged, and in danger of absolute demoralization from this precipitation of a multitude of undefinable extent across its line of march. The first peril was from disease. These poor people brought into camp all the hideous complaints that, like demons of destruction, dogged the steps of poverty, squalor, and the uncontrollable lives of an ignorant slave population at once set free. Every man with brains in his head and a heart in his bosom was thinking and feeling with all his might what could be done to evoke order from this fearful chaos, and the great contingent of mischief that, in the most patriotic army, is ever on the alert to gorge itself with its own vices, found here "an open city" of the evil one, wherein to find for itself a speedy fate of demoralization and destruction.

In the whole career of Gen. Ulysses S. Grant, the greatness of which a generation after his death is now fully becoming apparent to the American people, nothing is more characteristic than the decisive way in which he faced and disposed of this terrible crisis, at once relieving the Army in its perilous mission to open the Mississippi to the Union from the danger of being smothered in this cloud of black dust raised by its own advance, and planting in the very heart of the slave empire the permanent foundations of the broader and more Christian American civilization. And, as by a special favoring Providence, another young man from the same State, then so prolific in able executive characters—Ohio—was thinking and as far as possible acting along the same lines of advance as the general at headquarters. How it came about that at just this emergency the eye of the great commander fell upon this young man, to whom more than any other the South owes a debt of boundless gratitude for patriotic aid, comfort, and leadership in its opening "campaign of education," was never known to Chaplain Eaton. He does tell the story, like the chapter of a thrilling romance, how, after an evening in camp, passed in the company of his own friends of the Twenty-seventh Ohio, around a bonfire in the pine woods of Grand Junction, he found in his tent and read by the light of a tallow dip, the following order:

HEADQUARTERS THIRTEENTH ARMY CORPS,
DEPARTMENT OF THE TENNESSEE,
Lagrange, Tenn., November 11, 1862.

Special Order, No. 15.]

Chaplain Eaton, of the Twenty-seventh Ohio Infantry Volunteers, is hereby appointed to take charge of the contrabands that come into camp in the vicinity of the post, organizing them into suitable companies for working, seeing that they are properly cared for, and setting them to work picking, ginning, and baling all cotton now out and ungathered in field.

Suitable guards will be detailed by commanding officers nearest where the parties are at work, to protect them from molestation.

For further instruction the officer in charge of these laborers will call at these headquarters.

By order of Maj. Gen. U. S. Grant.

Well may the recipient of this "Order, No. 15" now say, thirty-eight years after he read this astounding summons, "Never in the entire army service, through the whole war, in the midst of battle, imprisonment, the roar of cannon, the explosion and destruction of ships, the horrors of the hospital or the terrors of surprise, or my own exposure to assassination, do I recall such a shock of surprise, amounting to consternation, as at the end of this brief summons to undertake what seemed to me an enterprise incapable of human achievement." The chaplain had never spoken to General Grant, and his previous contact with superior military characters in Missouri and the Southwest had not impressed him with the pleasure of such eminent acquaintance. He already knew enough to see at once the prodigious difficulties that would beset him at the outset. For already dissensions had commenced. Every vile or weak soldier or officer was already mired in the slough of an army of slave women, to whom chastity was like a word spoken in an unknown tongue. Every insolent army upstart "dressed in a little brief authority" was longing to domineer over a group of untrained negroes. In all that concerned the vast system of field labor he anticipated perpetual collision with the discipline and movements of the army. The clearing of the camps of the floating crowds of sick and dying, suffering with contagious diseases, was a task for a national sanitary commission rather than a young chaplain of volunteers. Filled with these apprehensions and determined, if possible, to decline the honor of leading this forlorn hope of the new civilization, the chaplain rode to Lagrange. To his surprise no obstacles such as he had met with during his previous experience barred his way to an immediate audience. On his tap at the door of the dining room of the hotel of the little village where the general held his quarters he was summoned to come in. On opening the door he saw a man of low stature, only distinguished in a room full of officers of the higher rank by his shoulder straps, seated at a little table, busy giving his final orders for the immediate advance of the army. At once he saw that all these persons were aware their commander in chief must be held in due respect. In place of the intemperate, incompetent, vulgar refugee from the old United States Army drifted into a post far beyond his ability to fill, as was the common report, he saw that here was a man to be followed, respected, and obeyed.

The chaplain was requested to be seated, and, on the clearing of the room, the General called him to his side with a beckon of the hand and the salutation: "So, you are the man who is to command the army of contrabands." He listened with admirable patience to the almost pathetic appeal of his visitor to be delivered from a fate so decisive as awaited any man who put his hand to that plow, and at the end replied: "You will at once proceed to carry out the order you have received. I appreciate the difficulties of the position. But, you see, I have called you to a personal cooperation. I have issued this order and will stand behind you in its enforcement."

From this time forth, in connection with General Grant's command in the valley of the Mississippi, Chaplain Eaton realized the full significance of his commander's promise to "stand behind him." At this first interview the General in the simple, direct, and business-like way in which he went about suppressing the revolt of eleven great Commonwealths, and their struggle to drive four additional border States into the maelstrom, talked out his own views concerning the "negro problem" as it was then and there presented. With growing astonishment, the chaplain, as he listened, noted with what a breadth of statesmanlike forethought and what marvelous control of the smallest details the subject had already been

thought out before he moved. He had a practical method for solving the problem; a firm grasp on the labor question, as far as it affected the host then preying on the army. He already appreciated the power of the religious and philanthropic agencies then at work, while he foresaw how embarrassing they might become in the hands of unwise and visionary workers. He said to the chaplain: "We must remember that these people are now freedmen, and that they will not only become laborers but soldiers and citizens of the country."

Certainly a good Providence, working through a providential man, directed the choice of the new superintendent of the freedmen in four States, densely populated by the colored race. First and last, 700,000 of the freedmen came under the supervision of the new "commander of the army of contrabands." John Eaton, jr., was born in 1829, in southern New Hampshire, one of a family of many children. He was educated in the common schools of that day, and by work at the homestead afterwards, he joined the great crowd of scholars that were drawn to the Thetford Academy, under the presidency of Dr. Hiram Orcutt. He graduated at Dartmouth College in 1854, and, at the age of 25, went to Cleveland, Ohio, where, for two years, he was principal of one of the common schools. He rose in two years more to the superintendency of the common schools of Toledo, Ohio, then a growing city of 30,000 people. Three years later we find him at the Theological School in Andover, Mass., in the character of "resident licentiate." At the beginning of the war he enlisted as chaplain of the Twenty-seventh Ohio Regiment of Volunteers, composed in large part of his old friends and associates at Toledo. His early service was in the campaign in Missouri. He was present after the battle at Springfield, was twice captured and held as a prisoner. Through a series of disagreeable experiences he found himself, in 1862-63, following the divided command of Generals Halleck and Grant, and was present at many of the important operations and engagements that culminated in the final attempt of the South to block the way from the great Northwest to the Gulf by the establishment of a stronghold at Vicksburg. At the age of 34 he believed himself summoned, as by a voice from above, to a work the importance of which he only dimly understood and from which he shrunk instinctively as almost too great for human nature to encounter.

But the word of command had gone forth, and Chaplain Eaton was not the man to longer hesitate when duty, however appalling, pointed the way. He had not mistaken either the discouragement, the labor, or the personal peril of his new position. As soon as it began to take on the contact with the disaffected populations, amid which the army was operating, his life was in constant peril. More than one man was assassinated by being mistaken for him. Within a week he came in collision with a military official who defied his authority by depriving him of his means of transportation. He appeared with him, under arrest, before General Grant, who quietly informed his complainant that Chaplain Eaton's authority was supreme within range of his command. This decision was enforced six days after the original order by a second document, here reproduced:

HEADQUARTERS THIRTEENTH ARMY CORPS,
DEPARTMENT OF THE TENNESSEE,
Lagrange, Miss., November 17, 1862.

Special Order, No. 21.]

Lieut. Col. Charles A. Reynolds, chief quartermaster of the department, will furnish Chaplain J. Eaton, jr., in charge of the contrabands at Grand Junction, Tenn., at his requisition, such tools and other implements as he may require; also materials for baling cotton, and clothing for contraband men, women, and children. Unsalable soldiers' clothing will also be issued to him.

By order of Maj. Gen. U. S. Grant:

JNO. A. RAWLINS,
Assistant Adjutant-General, Commanding.

The operations of the new superintendency were further aided by the conferring of the title of "colonel" on Chaplain Eaton. After some delay he was finally given the title as "Colonel of the Ninth Regiment of Colored Volunteers of Louisiana," with a body of subordinate officers especially equipped for the work assigned him. He retired from the service at the end of the war with his present title of brigadier-general. It was only a few weeks after the beginning of his labors that the army of General Grant was compelled to retreat upon Memphis, Tenn., by the destruction of its base of supplies at Holly Springs, Miss. This necessitated the early removal of the superintendent of freedmen to that city, then a swarming hive of humanity, requiring the uttermost vigilance of administration for the public safety against all the perils of a situation so complicated. It was only by gradual steps that a system could be put in operation, which at once minimized the danger of anarchy and placed the numerous emancipated people in a condition to go onward toward the practical recognition of the liberty, which so far was little better than a "glittering generality."

The first efforts, of course, were directed to purging the camps of the elements so dangerous to the order, health, and efficiency of the soldiery. In this work General Eaton was assisted materially by the sanitary commissions, under the eminent leadership of Rev. Dr. Henry W. Bellows, of New York, and Rev. Dr. William G. Eliot, of St. Louis. Then came the organization of the colored working force, male and female, in relieving the troops, largely serving in an exhausting and unusual climate, from overwork, and in gathering the crops of cotton and corn. The cotton was sold and the avails turned into a military chest, and the corn and other produce contributed to the support of the army and its colored annex.

By the following summer, 1863, the scene of military operations was transferred to the vicinity of Vicksburg. Numbers of the freed people were gathered into camps and employed during the siege of the city. It was only a few days before the surrender of Vicksburg, on July 4, 1863, that General Grant, amid the anxieties of the closing days of this memorable siege, gave several hours to a patient listening and discussion of the first general report of Superintendent Eaton, followed by this important letter, addressed to the President of the United States:

NEAR VICKSBURG LANDING, June 11, 1863.

Hon. A. LINCOLN, *President of the United States*:

Finding that negroes were coming into our lines in great numbers and receiving kind or unkind treatment, according to the views of the troops they first come in contact with, and not being able to give that personal attention to their care and use the matter demanded, I determined to appoint a general superintendent over the whole subject and give him such assistance as the duties assigned him might require. Mr. Eaton was selected for this position. I have given him such aid as was in my power by the publication from time to time of such orders as seemed to be required, and generally at the suggestion of the superintendent.

Mr. Eaton's labors in his undertaking here have been unremitting and skillful, and I fear in many instances very trying. That he has been of very great service to the blacks in having them provided for, when otherwise they would have been neglected, and to this Government in finding employment for the negro, whereby he might earn what he was raising, the accompanying report will show, and many hundreds of visitors and officers and soldiers near the different corps can bear witness to.

I have the honor to be, very respectfully, your obedient servant,

U. S. GRANT,
Major-General United States Volunteers.

On the transfer of General Grant to the scene of war around Chattanooga, Tenn., in the autumn of 1863, Colonel Eaton was placed in direct communication with the Secretary of War, acting through the Adjutant-General. By the order issued March 5, 1863, the superintendent of freedmen was required to raise colored regiments for the supervision and protection of the negroes, and appoint assistant

superintendents, all subject to his order. By this comprehensive arrangement he found himself placed virtually in military control of the colored people in portions of the four States of Tennessee, Arkansas, Mississippi, and Louisiana, to the number of nearly 800,000, and intrusted with financial responsibilities which under ordinary circumstances would have amounted to \$350,000. During the first year "not a cent of money was drawn from the Government for the freedman on any account." A temporary tax on the proceeds of labor met the increasing expenses of this masterly campaign of practical education.

The assistant superintendents were chosen with great discretion. Spellman, Fisk, Warren, and Hawley were assigned to the different States, in a country double the extent of the British Islands, and Col. Samuel Thomas was appointed as assistant general superintendent, with full authority to act in the absence of Superintendent Eaton.

The able-bodied freedmen of both sexes were provided with work on the opening of the early Southern spring, according to circumstances. Partly by direct leasing of land upon the abandoned plantations, by hiring out to the loyal planters and arranging for their employment by people from the North who, in great numbers, flocked to the new field of enterprise with the wild expectation of realizing a fortune in a year, the complicated and exhausting work went on. At a later period, through the transferral of large portions of the colored department to Washington, a condition of spoliation was developed which at once left the superintendent of freedmen powerless to act, with the result that a grand carnival of mismanaged business, up and down the great valley, brought discredit to the Government, embittered the well-disposed of the home-staying Southern white people, and wrought demoralization among the freedmen. By the withdrawal of the main army, the military arm could only give protection as garrisons at a few important stations. By a Government order, Assistant Superintendent Thomas was made provost marshal of freedmen, to administer justice and evoke public order out of chaos. The next step was the placing the entire control of the freedmen under the direction of the assistant superintendents, reporting to their chief, and in 1865, at the close of the war, the entire direction of this department for several years was given to the Freedmen's Bureau.

It should be borne in mind that most of the disorder and friction between the authorities of the National Government and the people of the subjugated States, which has been by popular prejudice imputed to the Army, was really due to the presence of the great crowd of civilians who thronged the entire region, and operated in a way practically impossible of arrest by an army always on the point of being transported to new and distant fields of activity. It was not remarkable that a people like that of the United States, which during the entire colonial and national existence had never had the experience of a great civil war, and never, in large force, was the invader of any country save a wilderness of savages and brief campaigns in the Canadas and Mexico, should have been quite unaware of the European severe laws of war, and been inclined to act according to their own good will and pleasure in the districts left without the protection of the Army. The extreme bitterness of the opposing governments and the greed for gain that saw visions of sudden wealth in the plantation lands, from which was realized such a harvest of financial dust and ashes, the terrible hostility of the unlettered portions of the Confederate people, especially toward the emancipated negroes and their friends, explain much that no candid historian can attempt to justify. It was a happy day for the American people when this era of discord gave place to the renewed occupancy and local government of the conquered section by its own people, who hereafter must be held accountable for all that has henceforth occurred in the same direction. In the midst of the overwhelming tumult of the renewal of industry by the hiring of the colored people for work on the plantations from which a year before, during the war, they had fled as slaves, the labors of Superin-

tendent Eaton and his faithful and able corps of superintendents read like the struggle of a forlorn hope on the deck of a ship driven before a tempest, every instant threatened with destruction.

It was only after the removal of Superintendent Eaton to Memphis, Tenn., in the winter of 1862, that an organized method of teaching the freedmen in schools could be inaugurated. It was the policy of the Government in military occupation of any Southern city, as far as possible, to encourage and aid in the reestablishment of any system of public instruction it found in operation. In Tennessee such a system was found in the cities of Nashville and Memphis, and one of the earliest tasks of Superintendent Eaton was to complete the arrangements for public education by aiding the schools for the instruction of the freedmen of every age. The charge of the public schools in Memphis for the whites was assigned to the care of the military authorities. One little school in a tent, taught by a woman, was the corner stone of the scheme that for the first time planted the American system of universal education in its most characteristic feature—the education of all children and youth by the people—in the entire region of the lower Mississippi Valley. In rapid succession in Memphis, Vicksburg, Natchez, Little Rock, and Pine Bluff, Ark., and on the islands and the bluffs of the great river, the colored children and youth, and, to a considerable extent, the adults of these people, were brought under instruction. A small tuition fee, ranging from 25 cents to \$1.50 per month, was required of such families as were able to pay, while the destitute were taught freely. The teachers were almost exclusively from the North, and among them were many of the excellent men and women that came on an errand of mercy to a benighted people. As far as possible the poorer class of the white population of the country was included in these efforts, although thus far the work was difficult. In fact, at first the opening of the schools for the colored people was received by the illiterate and unmanageable class that for years had made the conquered States practically an enemy's country almost as a new declaration of war. It was evident both to the Southern and Northern people that a body of youth, initiated for a few years even in the elements of letters, could never again be enslaved, and as the vast majority of the Southern people, even to the very last, believed the Confederacy had "come to stay," it was noted that not only a portion of the old masters but especially the class who, never having owned a negro, were ready to fight and die to keep him in perpetual bondage, should have visited these schools on their opening with a malignant display of hatred, often amounting to violence. For several years the burning of colored schoolhouses, the persecution and occasional murder of their teachers, and a general hostility to the endeavors of the colored race to obtain schooling, was a part of the tumultuous history of the time. Superintendent Eaton was marked as the inaugurator of this hateful policy, and only by the protection of the good Providence that seems to guard the life of every man essential to a great advancement of the race was he kept alive. During the four years of the war the assistant superintendents stationed at the different points in the region in these four States were under the general direction of his superintendency.

Besides this difficulty on the ground, the work of the education of the negroes was greatly complicated by the rush of numerous church and private benevolent agencies to the field. The schools that were established by the various churches of the North did not willingly come under the direction of the superintendent of freedmen, while they often did expect liberal aid and comfort by the furnishing of army rations, the transportation and housing of their teachers, and the general forwarding of their enterprise. Of course this at once introduced confusion and the working at cross-purposes for a common end. It was found for a time almost impossible to maintain schools on the plantations that were removed from immediate military protection. This matter was brought to an issue through Order No. 26, September, 1864, by which Superintendent Eaton was authorized to appoint

superintendents of colored schools with power to act in all the details of their office. At several of the points on the Mississippi River the seven gentlemen delegated assumed direction. They only attempted to introduce the colored people, young and old, to the proprietors of plantations; to give industrial training, especially in good housekeeping and women's work for the girls and their elders; to establish orphan asylums; and generally to act as a benevolent committee of all work in relation to this people. An important part of their duty was the establishment of legal marriage among thousands of people who hitherto had lived under a system that was a proper university for the perpetuation of the social evil assumed to be a "race characteristic" of the negro. It is impossible to decide how many of the freedmen were included under the immediate protection of the Government during these four years' administration of Colonel Eaton as superintendent of freedmen in the Southwest. The reports of the different superintendents, as summarized in 1864, give more than 6,000 at school in nine different points on the Mississippi. Of course this includes but a small portion of the multitude that, even before the establishment of the Freedmen's Bureau in 1865, were brought under instruction by the great number of private educational and church agencies operating in this new and inviting field.

It is not the purpose of this essay to give the working of all the agencies for the education of the colored folk of the South during the war in detail. It is still to be hoped that both General Eaton and General Saxton will occupy the years that remain to them in preparing a reliable history of their great services and the outcome of all that was attempted in the way of planting the American in the place of the local and provincial type of society through the vast regions occupied by the armies of the Union and left to the perils of reconstruction by the advent of peace. A vast literature has grown up out of this important work, of which the proper arrangement and completion would be an interesting task for a competent historian, and from which could be gathered the explanation of much that is still hidden in obscurity or enveloped in the cloud of prejudice that still broods over the record of that mighty period. Enough to say, that this campaign of education for the most needy and neglected 6,000,000 of the American people, from 1861 during the succeeding years, closed by the incorporation in the revised constitution of every reconstructed Southern State of a provision for the establishment of the American common school, under the protection of the military power of the General Government which was an imperative necessity. It is doubtful if this purpose could have been achieved otherwise, and without the establishment and the vigorous support of the common school for all classes and both races, the union between the reconstructed States and the Republic would have been far more a matter of after-dinner oratory and a periodical interchange of "distinguished consideration" than that living and working together of all States and sections under the inspiration of common ideas and patriotic aspirations which is the only assurance of permanent republican nationality.

The great personal organizing faculty of Superintendent Eaton, with a wonderful exhibition of executive common sense and tact, was recognized by President Lincoln a few months before his death, in the following general order:

Colonel EATON:

You will continue your supervision of freedmen over the same territory and on the same principle as in the past, making such improvements as experience may suggest, until legislation shall require measures for further change.

A. LINCOLN.

FEBRUARY 10, 1865.

The subsequent work of Colonel Eaton, as associate commissioner with General Howard in the administration of the Freedmen's Bureau in 1865, his editorship of the *Memphis Post*, a journal established to promote national sentiment in the

Southwest in 1867, his two years service as State superintendent of public instruction in Tennessee during the brief period of reconstruction, and his call to the final and greatest work of his life, the practical development of the national Bureau of Education, lifting it from a bureau with three clerks and \$10,000 income to the organization it has since become, followed by his presidency of Marietta College, Ohio, which was left in 1890 for a position of retirement from public and professional occupation to the general work which often proves the most fruitful of the long years of a great man's life, form an interesting chapter of history. For more than twenty years, from 1863 to 1883, no man in the United States contributed more to the final establishment and increasing importance of the common-school system in the South than he. It would be difficult to name an important movement affecting that section of the country in which he was not deeply interested, and, oftener than was suspected, he was the most effectual personage in its direction and success. He was the trusted and confidential friend of the great soldier and the greater President, on whom the fate of the country more than on any special human agency depended during the momentous years of the civil war. In all legislation affecting the South he was afterwards in frequent consultation with the most influential public men. With no eminent literary talent and far too little ambition to preserve his own vast and versatile labors in historical form beyond the exigencies of an immediate official demand, his mind is to-day a most richly furnished library of representative facts, ideas, and personal memoirs which open avenues of light through a broad realm of national interest.

Whatever may have come of his tremendous labors and those of his faithful assistants during these early years, working under a military supervision, it can not be reasonably doubted that any competent reader of the educational literature thrown up in this period, with the commentary of subsequent events, will be forced to acknowledge that then and there was laid a permanent foundation for the new departure of a system of common schools in the South which should take the little child by the hand and lead him as far as he was able to go along the broadening path to the summit of society. In doing this General Eaton not only incurred the implacable hostility of all evil-disposed, but gained the respect and enjoyed the appreciation of the large body of good people in the South who favored the admission of the colored race to a share in the new common-school system at a later date. The slave-holding class, with its professional and educated environment, has so far been responsible for the majority of the good things done by the Southern people for the negro that have enabled him to reach his present hopeful state. And the best of all the things done has been the opportunity of education which, however imperfect and too often abused and turned to a pretense, is responsible for more of the genuine progress in these States than all the legislation and even the new industrial development of which such account is now being made. Numbers of the best men and women who have honored the country by their great labors in this field of Southern education were either "effectually called" or reliably aided by the hearty cooperation and genuine interest of General Eaton.

Only the limit of space compels the absence from this essay of the entire publication of a remarkable letter addressed by Superintendent Eaton to Mr. Levi Coffin, a distinguished representative of the religious Society of Friends, living in Cincinnati, Ohio, and the agent of the Western Freedman's Aid Committee of that city, dated January 5, 1864. In this almost apostolic epistle the good general sets forth the magnitude of the work intrusted to his charge, the effort to avoid fatal mistakes and the lessons of experience gained by its administration. It was indirectly a letter to all the people of Great Britain, as Mr. Coffin was at that time abroad, and presents with striking freshness the insincerity of the too prevalent distrust and disparagement of the purposes and aspirations of the Union cause.

At this point [he writes] this superintendency, embracing the territory between the lines of our army from Cairo, Ill., down the Mississippi to Red River, La., together with the State of Arkansas, numbered in its care during the past year, 1863, 113,650 freedmen. These are now disposed as follows: In military service, as soldiers, laundresses, cooks, officers' servants and laborers in the various staff departments, 41,150; in cities, on plantations, and in freedmen's villages and cared for, 72,500. Of these, 62,500 are entirely self-supporting—the same as any industrial class anywhere—as planters, mechanics, teachers, preachers, draymen, etc., working on their own responsibility or as hired laborers. The remaining 10,000 receive subsistence from the Government. Three thousand of them are members of families, whose heads are carrying on plantations and have under cultivation 4,000 acres of cotton and are to pay the Government for their subsistence from the first income of the crop. The other 7,200 include the paupers (those over and under the self-supporting age, the cripples, and sick in hospitals) of the 113,650 and those engaged in their care, and instead of being improvident have now under cultivation 500 acres of corn, 790 acres of vegetables, and 1,500 acres of cotton—besides the work done by wood choppers, etc. There is reported the aggregate sum of over 10,000 acres of cotton under cultivation. Of these, about 7,000 acres are loaned and cultivated by blacks. Some of these are managers of as high as 300 or 400 acres. It is impossible to give, at the present date, any definite statement of many of the forms of industry. Fifty-nine thousand cords of wood are reported as cut within the line of 110 miles on the river banks above and below Vicksburg. The amount cut by these people is enormous. The price of cutting is from 50 cents to \$2.50 per cord. Thirteen thousand three hundred and twenty of the whole number have been under instruction in letters, about 4,000 have learned to read quite fairly, and about 2,000 to write. * * * "Each move makes history." To enter upon this duty was to forsake friends and pass under a cloud; to have the sympathies taxed with the most trying forms of suffering and the mind racked by the severest social problems. The path was dark; there was no highway. * * *

In the management of the governmental efforts the aim has been to yield to no prejudice or fancy, to hold fast to common sense and Christian principles, to keep the eye on the lessons of history, and to search for their just teaching in regard to present times and exigencies; in a word, to make all governmental action to be simply the administration of justice between them as a freed people. The gifts of funds and supplies by the nation report a sum of \$300,000. * * * In striking the balance of expense and income to the Government of this emancipation policy we have to calculate what their industry would have produced in army supplies to the rebels from their presence in all the large cities, as the 15,000 in Memphis contribute a loyal element of security and strength; the value of the colored soldier, as well officered and disciplined, rapidly increasing in efficiency and commanding the respect of friend and foe. We overlook the fact that no one of these soldiers has cost the Government a bounty of \$300 or \$400. Of the five or tens of thousands sometimes fed, only 10,000 now receive supplies. * * * The wages of labor run as high as \$45 per month. * * * Evidences of the success of free compensated labor are becoming abundant. Shrewd Southern business men are confessing the greater profitableness of free labor. It is safe to count on motives of profit and the advancement of Southern sentiment as well as the social, mental, and civil weight of the entire black population and the result of the larger military operations in the work of reconstructing society in these regions. * * * The plan of General Grant was to gather the freed slaves on the right side on the rich soil along the rivers, in a sufficient number for defense as regular troops or militia, and put all others to industry, educate them, regulate the communities by martial law, under a head reporting to the Secretary of War directly under the Executive, and thus not only vindicating the policy of emancipation before mankind by offering an asylum for the comfort and training of the liberal rebels, by so much to weaken and demoralize their armies, to increase the number of troops in the field, and by lining the river banks for miles in breadth with a loyal population, self-supporting, and contributing to the revenue, to render thus secure the water courses, and then to cooperate in making successful our military operations. * * * Assure friends and all coworkers for truth in England that while those of us thrown among the most trying scenes of the war ask the candid judgment and manly sympathy and cooperation that it deserves, and such material aid for the distressed as their charity can bestow, we are not only confident of success, but that America will not make this great sacrifice of her precious life and blood in vain, either for her own people or the rest of mankind.

THE INAUGURATION OF THE COMMON-SCHOOL SYSTEM AMONG THE COLORED PEOPLE OF LOUISIANA, BY GEN. N. P. BANKS, 1863-64.

Gen. Benjamin F. Butler, who had cooperated with Admiral Farragut in the capture of New Orleans in 1861, and performed most effective duty as the greatest chief of military police developed in the Union armies during the civil war, was released from his command in 1862 by the appointment of Gen. N. P. Banks, also of Massachusetts, to his department. In the autumn of 1862 General Banks left the harbor of New York with an army of 20,000 volunteers, under orders to open the lower valley of the Mississippi River and establish himself at a commanding position in the Red River country, for the protection of Louisiana, Arkansas, and eastern Texas. A series of military operations, with varied fortunes, in the year 1863 culminated in the capture of Port Hudson, a few days after the fall of Vicksburg, Miss., which accomplished the opening of the great river from the Gulf to Cairo and the virtual establishment in the entire region along its banks of the authority of the Union.

But previous to this, by the request of President Lincoln, encouraged by the condition of civil affairs in the department of General Banks, the loyal people of Louisiana had inaugurated a movement for the return of the State to the Union. In December, 1862, two Union Representatives to Congress were elected by a vote, perhaps representing one-tenth of the white population of the State, under the protection of General Shepley, military governor of Louisiana, and in February, 1863, the Commonwealth was once more represented in the Congress of the United States. After the important series of victories for the Union armies in 1863, President Lincoln proposed a definite plan of reconstruction to Congress. The substance of the plan was that, after eliminating certain classes in the seceding States from the suffrage, one-tenth of the voting population of 1860, of loyal tendencies, might be intrusted with the formation of a State government.

In January, 1864, a free State convention was held in New Orleans, followed by a proclamation from General Banks containing suggestions for reconstruction. In February, 1864, a governor was chosen, and inaugurated on March 4. A new State constitution was formed, which contained a prohibition of negro slavery and a provision for the establishment of a system of free schools. While the political side of the movement somewhat miscarried, owing to a conflict of opinion between Congress and the President, calling his action to account in the method of reconstruction, the destruction of slavery and the establishment of the most deadly enemy of all slaveries, the people's common school, remained intact.

Immediately after this reorganization of the State, on March 22, 1864, General Banks issued an order for the establishment of a system of common schools for the freedmen. A board of education was created by the Department of the Gulf, with power to establish common schools, employ teachers, build schoolhouses, arrange courses of study, and exercise the general authority usual in the school systems of the Northern States. The purpose of the order was stated "for the rudimental instruction of the freedmen of the department, placing within their reach the elements of knowledge which give intelligence and value to labor." With the exception of a few of the French creole families, under the old order the teaching of the negro had been strictly prohibited by law, but at once there sprung into existence as by magic a complete system of public instruction.

At least 150 schools for colored children, with 265 teachers and 14,000 pupils, were established. In the city of New Orleans 19 large schools, with 104 teachers and 5,750 pupils, were in session. More than 50,000 children of colored people were taught to read in the city and immediate vicinity. The inspector of the Freedmen's Bureau, Mr. J. W. Alvord, in 1866, reported the schools "in a remarkably encouraging condition. No Southern State has so large an organization. No State has excelled Louisiana in the detailed perfection of its school system." A number of

Southern white teachers had been employed and were favorably regarded as having a superior knowledge of the negro. Colored teachers were employed when found capable of doing the work. General Banks, more than twenty years before, as a rising young public man, had been appointed as the first general agent of the State board of education in Massachusetts, then under the administration of Dr. Barnas Sears as secretary of the board and virtual State superintendent of public instruction, and was henceforth known as a fast friend of universal education. He inaugurated the New England idea of combining the academical and industrial elements in the schooling of the colored people in Louisiana. All land owners who employed the negroes in the fields were taxed to contribute to their schooling. A superintendent of instruction, Maj. Rush Pumley, from Philadelphia, was appointed, and the inspector of the Freedmen's Bureau grows enthusiastic in his report over the great success of the experiment.

Here, for the first time, was established in the South a complete system of the American common school, supported by local taxation. In South Carolina, Virginia, and Tennessee, where schools for the freedmen were established under the protection of the military power, the native white people were not directly taxed for their support. By the early political movement in Louisiana during the war, a provision for public education had been placed in the revised constitution of the State, and the schools were virtually placed under State control. There had been several attempts for the establishment of a system of common-school education for white youth in Louisiana previous to 1860, with more or less success, but the most satisfactory result had been reached in New Orleans. About the year 1838, Dr. Shaw, of Massachusetts, had been called to New Orleans in response to the request of the city authorities to Horace Mann, then in the second or third year of his administration, and the public-school system established under his superintendency had already become a permanent feature of municipal policy at the breaking out of the war.

But the provision in the revised constitution for the complete establishment of the system was premature work. For not only the schools, but the constitution under which they were established, was held up by the military army of occupation. The overwhelming public opinion of the white people of Louisiana was opposed to the public schooling of the negroes, although it is probable that the common school public that for so many years had been baffled in its attempt to set up a common-school system for the whites was getting ready to undertake this work, but then unable to support it financially. In 1866 the collection of the tax on landowners for colored schools was suspended by military order. Great numbers of the colored parents petitioned the authorities to permit them to assume the money tax as their own, although already paying their own portion for the general system. It was this condition of suspended action of the schools that we find in the report of the inspector of the Freedmen's Bureau in 1866. Industrial schools for the colored people had meanwhile been opened in New Orleans.

The war period, from 1861 to 1867-1869, can be regarded as a sort of rehearsal for the grand experiment of offering to the 5,000,000 or 6,000,000 emancipated freedmen in the South the complete system of elementary education as then developed in the United States, to the extent to which the people of these States were competent to accept and anybody was able and willing to support it. Indeed, the great experiment from Washington to New Orleans practically included every variety of schooling then in vogue in the country. First came the movement by private charity. Following this came the churches and philanthropic associations for the schooling of the contrabands in camps and barracks; even on the field of battle during an engagement the colored soldiers clutched the spelling book in one hand while they grasped the musket in the other. On this was laid the basis of the extended system of church denominational and private schools, not only for the elementary but the secondary and higher normal and industrial

education, that has become so prominent a factor in all the Southern States, and without which the common schools, the churches, and society of the colored race in general would have been deprived for an entire generation of its most valuable leadership in all departments of its new life. With this has come up a great and beneficent movement for the reformation of the church, school, and society among the negroes, in the general improvement of their condition, and the development of the professional class of teachers, clergymen, physicians, and leaders in their new industrial life.

But far more important and vital than this, indeed, the movement to which all that has been done by the North and the nation has been tributary, was the founding, first in an indirect, and finally in a direct way, of a complete system of schools under the protection and by the support of the military arm of the Government of the United States. Through Gen. Rufus Saxton, in the Department of the South, Gen. John Eaton, jr., in the valley of the Mississippi, and by Gen. N. P. Banks, in Louisiana, this original effort was developed into a veritable public school system of the national type, before the establishment of the Freedmen's Bureau. That amid the tumults of war, and its terrible excitements, and an almost incredible experimenting with the emancipated class, and with so little money available for the support of the movement, so much could have been accomplished is one of the many wonders of our American history. Nevertheless, it was done, and so well done, that within ten years from the beginning of the free elementary schooling the experiment had evolved into the establishment of the complete American common school system, including the children of the schools of twenty years before.

Our next step will be to put on record the attempt of the United States Government during five years by the Freedmen's Bureau to extend and develop the original experiment through the stormy period of Southern State reconstruction, followed by the final consent of the Southern white people, restored to the full political control of their own States, to accept the entire system of American universal education in connection with the Peabody education fund, the establishment of the national Bureau of Education, and the large appropriation of public lands and moneys by Congress for the establishment and support of colleges of agriculture and the mechanic arts in all the States of the Union.

THE FREEDMEN'S BUREAU.

The operations of the Army and the various private and church organizations for the schooling of the freedmen already described received a new direction by the passage of the following act of Congress, approved by President Lincoln March 3, 1865, almost the last official act of the great President:

AN ACT to establish a bureau for the relief of freedmen and refugees.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there is hereby established in the War Department, to continue during the present war of rebellion and for one year thereafter, a Bureau of Refugees, Freedmen, and Abandoned Lands, to which shall be committed, as hereinafter provided, the supervision and management of all abandoned lands and the control of all subjects relating to refugees and freedmen from rebel States or from any district of country within the territory embraced in the operations of the Army, under such rules and regulations as may be prescribed by the head of the Bureau and approved by the President. The said Bureau shall be under the management and control of a commissioner, to be appointed by the President, by and with the advice and consent of the Senate, whose compensation shall be \$3,000 per annum, and such number of clerks as may be assigned to him by the Secretary of War, not exceeding 1 chief clerk, 2 of the fourth class, 2 of the third class, and 5 of the first class. And the commissioner and all persons appointed under this act shall, before entering upon their duties, take the oath of office prescribed in an act entitled "An act to prescribe an oath of office, and for other purposes," approved July 2, 1862. And the commissioner and chief clerk shall, before entering upon their duties, give bonds to the Treasurer of

the United States in the sum of \$50,000 and the latter in the sum of \$10,000, conditioned for the faithful discharge of their duties, respectively, with securities to be approved as sufficient by the Attorney-General, which bonds shall be filed in the office of the First Comptroller of the Treasury, to be by him put in suit for the benefit of any injured party upon any breach of the conditions thereof.

SEC. 2. *And be it further enacted*, That the Secretary of War may direct such issues of provisions, clothing, and fuel as he may deem needful for the immediate and temporary shelter and supply of destitute and suffering refugees and freedmen and their wives and children, under such rules and regulations as he may direct.

SEC. 3. *And be it further enacted*, That the President may, by and with the advice and consent of the Senate, appoint an assistant commissioner for each of the States declared to be in insurrection, not exceeding ten in number, who shall, under the direction of the commissioner, aid in the execution of the provisions of this act; and he shall give a bond to the Treasurer of the United States in the sum of \$20,000, in the form and manner prescribed in the first section of this act. Each of the said commissioners shall receive an annual salary of \$2,500, in full compensation for all his services. And any military officer may be detailed and assigned to duty under this act, without increase of pay or allowances. The commissioner shall, before the commencement of each regular session of Congress, make full report of his proceedings, with exhibits of the state of his accounts, to the President, who shall communicate the same to Congress, and shall also make special reports whenever required to do so by the President or either House of Congress, and the assistant commissioners shall make quarterly reports of their proceedings to the commissioner, and also such other special reports as from time to time may be required.

SEC. 4. *And be it further enacted*, That the commissioner, under the direction of the President, shall have authority to set apart for the use of the loyal refugees and freedmen, such tracts of land within the insurrectionary States as shall have been abandoned, or to which the United States shall have acquired title by confiscation or sale, or otherwise; and to every male citizen, whether refugee or freedman, as aforesaid, there shall be assigned not more than 40 acres of such land, and the person to whom it was so assigned shall be protected in the use and enjoyment of the land for the term of three years, at an annual rent not exceeding 6 per centum upon the value of such land, as it was appraised by the State authorities in the year 1860, for the purpose of taxation, and in case no such appraisal can be found, then the rental shall be based upon the estimated value of the land in said year, to be ascertained in such manner as the commissioner may by regulation prescribe. At the end of such time, or at any time during said term, the occupants of any parcels so assigned may purchase the land and receive such title thereto as the United States can convey, to pay therefrom the value of the land as ascertained and fixed for the purpose of determining the annual rent aforesaid.

SEC. 5. *And be it further enacted*, That all acts and parts of acts inconsistent with the provisions of this act are hereby repealed.

Approved March 3, 1865.

ABRAHAM LINCOLN.

This law was one of the last approved by President Lincoln. The Freedmen's Bureau was born amid a military and political cyclone. On the 2d day of April, 1865, Richmond fell, and on the 9th of the same month General Lee surrendered at Appomattox Court-house, Va. On the following 14th of April President Abraham Lincoln was assassinated, and immediately Vice-President Andrew Johnson was elevated to his place. It was not until May 15-16 that Gen. O. O. Howard, of the United States Army, appointed commissioner of the Freedmen's Bureau by Secretary of War Edwin M. Stanton, assumed the office and issued his first circular as "Commissioner of Bureau of Refugees, Freedmen, and Abandoned Lands" and established his official headquarters at the corner of I and Nineteenth streets, Washington, D. C.

In his first circular Commissioner Howard announced the policy of the bureau, as follows: "The negro should understand that he is really free, but on no account, if able to work, should he harbor the thought that the Government will support him in idleness." On May 19 he defines the duties of the assistant commissioners to be appointed for all the late insurrectionary States. They were to be "super-visors of abandoned lands, and have control of all subjects relating to refugees

and freedmen in their respective districts. All agents of the bureau were to report to them in all applications for relief to be made to them or their agents." In a rapid series of circulars the commissioner further informed the public and his subordinates that the bureau was not established to supersede the action of other associations in the field. Cooperation was invited and urged with all these. "The utmost facility will be offered to benevolent and religious organizations and State authorities in the maintenance of good schools for refugees and freedmen until a system of free schools can be established by the reorganized local governments. It is not the purpose of the bureau to antagonize existing organizations, but to stimulate and facilitate them."

The difficulties attending the management of abandoned lands appeared at the beginning of the administration. On May 22 it was announced that numbers of the late owners of these estates were claiming possession. All such were informed that there would be no consideration of the claims of the disloyal owners and that the freedmen engaged in raising crops must be paid for their labor till the harvest ended. On May 29 Col. John Eaton, jr., was promoted from his great work in the Mississippi Valley to be assistant commissioner of the Freedmen's Bureau at Washington, and it is probable that much of the success of the bureau during the five years of its troubled existence was due to the large experience gained in his administration in the Southwestern department. By June 1, 1865, nine States had been included in the appointment of assistant commissioners and agents, who were stationed in the most important centers of their respective Commonwealths. The relief stations established during the war were discontinued as fast as possible, as it was the policy of the bureau to make all the people self-supporting. Loyal refugees were to be protected to the uttermost of the ability of the local officials and the freedmen assured of their rights as complete as the free white people. The teachers already at work among the negroes were urged to cooperate, and accurate reports were demanded. Colonel Brown in Virginia; General Whittelsy in North Carolina; Gen. Rufus Saxton in South Carolina, Georgia, and Florida; Colonel Osborne in Alabama; Chaplain T. W. Conway in Louisiana; Col. Samuel Thomas in Mississippi; Gen. Clinton B. Fisk in Tennessee, and General and ex-Governor Sprague, son-in-law of Gen. Benjamin F. Butler, in Missouri and Arkansas were appointed assistant commissioners. All of these men were fully competent, and several of them afterwards rose to distinction during the coming fifteen years of reconstruction. The teachers indorsed by the board were to receive rations, transportation, and the use of school buildings, although this dispensation of aid was to be strictly guarded.

By July 12 the policy of the bureau was announced through the authorization of the appointment of superintendents of education by the assistant commissioners, who should be authorized to cooperate with State authorities when such existed, and otherwise visit schools, and as far as possible aid and encourage the teachers acting under the different benevolent organizations from the North, and on certain conditions to assist in building or furnishing schoolhouses. Attempts were made to protect the freedmen from the injustice threatened by the new vagrant and labor laws enacted by several of the late insurrectionary States now being called into a responsible civil and political condition by the edict of President Johnson. The commissioner states that mischievous reports that the freedmen were to be given possession of the lands of their former masters were industriously spread abroad in order to unsettle labor. Already the chronic friction of a double authority was experienced in the complaints of some of the military commanders of the Southern districts that the assistant commissioners were exceeding their authority. The commissioner warns against this, and reminds his subordinates that all matters of military concern are to be referred to the army authorities.

In the 22 published circulars issued by Commissioner Howard during the year 1865 the policy of the administration of the freedmen's bureau was completely indi-

cated, and the great difficulties that beset its path were revealed. It was soon apparent that Congress in the framing of this comprehensive law had embarked on an enterprise involved in almost insurmountable difficulties. The radical mistake would seem to have been the involving of the educational movement with the prodigious work of administering on abandoned lands, protecting the refugees, redressing the wrongs of several millions of emancipated slaves, and generally acting as an ex-tempore civil and religious Providence through a realm as extensive as the whole of central Europe.

The whole matter was immensely complicated by the political policy of President Johnson, who at once, on his accession to the Presidency, by the advice of Secretary of State William H. Seward, assumed the responsibility of reorganizing the States lately in rebellion by sending to them provisional governors authorized to invite the white people, with the exception of certain classes of high military and civic ex-Confederate officials, to summon constitutional conventions, adapt their State constitutions to the present order of free society, assemble their legislatures, and elect members of Congress. This policy at once was carried out in all the seceding States, and the Thirty-ninth Congress of the United States, assembling on December 1, 1865, found itself confronted with a "solid South," in the political possession of the same people who, four years before, had formally seceded from the Union, waged a terrible war even to the verge of absolute exhaustion, and now demanded the recognition of their complete Statehood and the admission of their members to Congress, with all the rights of legal citizenship for their constituents. Their legislatures at once, in several States, passed laws affecting the freedmen that, in the opinion of the Northern people, practically remanded the negro to a state of slavery. His rights as a free laborer were greatly restricted and the right to bear arms denied. He was liable to be deprived of his liberty on charges of vagrancy; the colored youth to be bound out to an apprenticeship that certainly offered the opportunity for great abuse, and his further education was environed with hard conditions that amounted to a practical denial of the right to schooling. It is easy to understand into what a veritable pandemonium of hostile passions, insupportable difficulties, and impossible conditions this unfortunate bureau was plunged before the end of the first year of its existence. It was not so much that its local administration was intrusted to incompetent or unworthy men, but that the ablest and best men could do so little to advantage in such a state of affairs. The negroes, of course, returned to their former homes at the close of the war. Either they must be reinstated in their possessions and organized to go to work, or the entire laboring population of eleven great States would be reduced to beggary. The emancipated freedmen could not understand that the provision for leasing and buying abandoned lands did not mean the spoliation of their masters' estates in their behalf, and often either refused to work or were involved in endless misunderstanding and quarrels over their wages and conditions of support. The effort to educate and train them for their future duties by the agents of the bureau was met by the fact that they were already recognized as citizens of the United States and were practically under the code of laws enacted for their regulation by their former masters, enforced by local officials and a State militia. It was not remarkable that the white people should fall into a panic concerning the supposed dangers attending the setting free of 5,000,000 slaves, and honestly believed that these severe laws were necessary to preserve the peace and protect the lives of their families. A State, like a man, can lose its head, and a million men really become a mob under the influence of such a reaction as the waking up to the possible results of their situation by the people of the eleven ex-Confederate States in 1865.

Meanwhile the Congress of the United States recognized the situation brought in by President Johnson as a peril only less than that of open war. And then began the series of enactments that involved the Administration in a bitter and

exasperating conflict, only ending in the attempt to impeach the President. At once the members of Congress elected from the seceding States on appearing were refused their seats. A comprehensive law was passed to protect the freedmen against the severe provisions of the vagrant and labor laws of those States.

It is not the purpose of this essay to discuss or even to give a connected history of the political events of the five years following the close of the civil war, 1865-1870. Enough to say that the year 1869 found the late insurrectionary State governments established under the action of President Johnson abolished. The entire area of these eleven States was divided into five military districts, presided over by commanders of the national armies and their people living under martial law. New governments were originated by the return of all loyal people, including the negroes, and finally all the States were readmitted to the Union on condition of accepting the three amendments of the Constitution of the United States that made slavery and secession forever impossible save by an act of revolution, confirmed full American citizenship upon the negro, and forbade all discrimination in civil rights, including suffrage, on the ground of race, color, or previous condition. The disqualification of great multitudes of white voters in these eleven States, by reason of inability to take the oath of loyalty, placed the governments of several in the hands of a population largely composed of the freedmen, in many cases acting under irresponsible leaders from their own and the Northern States. Their legislatures were filled with extemporized statesmen, graduated from the plantations. The vacant seat in the Senate of the United States of Mr. Jefferson Davis, ex-president of the Confederacy, was occupied by a colored man, once a slave. In brief, after a frightful civil war of arms, in which 3,000,000 American men were enlisted and which not only ended in the defeat of the Southern forces, but practically left the old order of society in the sixteen slave States in ruins, came another war of politics, lasting for ten years, even more exasperating, which was only arrested by the returning good sense and patriotism of the Northern people; a conflict which if prolonged would have made republican society itself an impossibility through half the area of the Union.

It was during this period that the Freedmen's Bureau was buffeted like a frail ship amid the tumult of a tropical hurricane. Its attempted management of abandoned and confiscated lands practically came to nothing save a temporary occupation, and, to some extent, collection of taxes imposed on the seceding States by Congress. The confiscated lands could only be held by the Government during the lives of their disloyal owners, and by the end of the existence of the Freedmen's Bureau the policy of the Government was clearly indicated to abandon all attempts at wrestling with a problem so impossible as the virtual confiscation of real estate through half the Union. The system of relief for the impoverished and sick was already on the edge of collapse from the mighty development of productive industry in the white and colored discharged soldiery of both armies. The protection of the rights of the emancipated and loyal white people could only be assured by the Army, and the bureau had no other means of affording it.

It was inevitable that the permanent operations of an organization so frail, so loosely put together, and practically with no effectual power of enforcing discipline, would fall into confusion. Indeed, its first year's demand for \$11,000,000 was so preposterous and so disparaged the entire arrangement that an attempt to reenact the law, with larger powers, was defeated, and with difficulty it was put in execution by general acts of renewal for short periods. In 1868 all its functions, except the educational, were abolished. A strong opposition was encountered from the Army, which regarded it as a rival on its own field of occupation. The story of the bureau and the final examination of General Howard and his leading subordinate is familiar to all interested in the swift progress of events in that tumultuous period. The failure of the Freedmen's Bank, which resulted in the loss of large sums of money invested by the negroes, was a great calamity, from the effects of

which this people have never recovered. The reconstruction policy, which called the freedmen to a great festival of political power, made them forget the comparatively little aid that could be received from the bureau, and arrested its attempt to control the opinions and conduct of a multitude elated by their new citizenship, and too often acting under the influence of incompetent and mischievous leaders.

It was not from the lack of an earnest purpose, a sincere devotion to the welfare of the country, and a reasonable and energetic administration of the missionary work among this new "nation within a nation" that the Freedmen's Bureau was in many ways a failure. It now seems a marvel that the Congress of the United States should have attempted an undertaking so impossible as the practical "bringing up" of 5,000,000 of emancipated people, living in contact with and completely in the power of the 10,000,000 who during four years had fought to hold them in perpetual bondage, and who needed more than one generation of sorrowful experience and experiment to find themselves in permanent satisfactory relations with them. The failure of this enterprise was far more valuable as a lesson of what can not be done in an American State than its success would have been; especially if it had demonstrated the possibility of the Government of the United States holding eleven commonwealths in the condition of conquered provinces. The fact of the final emergence of all these States during the past twenty-five years from the terrible confusion in which they were left at the close of the civil war and their hopeful state of affairs to-day is a new proof of the wondrous political common sense of the American people that will forever refute the predictions of the pessimist and fortifies the faith of the patriot in the opening years of the second century of the nation's life.

But with all this ineffectiveness, the Freedmen's Bureau during the five years of its operation was one of the most praiseworthy agencies of the Government. While it was unable to achieve impossibilities, it wrought great positive good and prevented untold evils. No human organization, though administered by angels, could have entirely carried out what was proposed by the original statute. As well might Congress have legislated against a northwestern cyclone or a Mississippi River overflow as to expect that a country as large as central Europe, left in the condition of the eleven ex-Confederate States at the close of our civil war, could be kept in order by less than 1,000 officials, the majority drawn from civil life, and absolutely dependent on military support for the execution of a bewildering variety of duties. In these eleven States was concentrated five-sixths of the entire negro population of the country, in 1880—5,360,298, with 7,632,852 of the white race. In nine of these States, in 1880, there were 4,563,763 colored and only 5,286,784 white people. In three States—Mississippi, Louisiana, and South Carolina—the negro population was in considerable excess of the white. The freedmen were practically all illiterate. As late as 1884, 68 per cent of the colored voters and 77.6 per cent of the colored women could neither read nor write, while at the same date 14.3 per cent of the white voters and 19.4 per cent of the white women in these States were illiterate. And when we consider the condition of a vast population suddenly arrested in the midst of a most exasperating civil war, we may well conceive the burden cast by a legislative enactment upon this little group of poorly paid officials, many of them living in daily peril of their lives, working amid a cloud of dust raised by the whirlwind of contention that raged through the entire population of the North, not one in a thousand of whom outside the army of occupation had any personal knowledge of Southern affairs, or any intelligent notion of the right thing to be done or the possible way of doing it in the administration of local affairs through the Southern half of the Union.

The whole situation could not be better described than in the final report of Commissioner-General O. O. Howard—a document that should be read by every person who proposes to form a correct judgment on the state of Southern public affairs at the time when the Freedmen's Bureau went into operation. Less than

a month after the passage of the act the President of the United States was assassinated, and the war suddenly came to an end with a crash that resounded through the civilized world. Says General Howard: "In every State many thousands of the freedmen were found without employment, without homes, without means of support, wandering into towns and about military posts where they could find protection and be kept alive. The sudden collapse of the rebellion, making emancipation an actual fact, was like an earthquake. It shook and shattered the whole social system. It broke up the old industries and threatened a reign of anarchy. Even the well-disposed and humane landowners were at a loss what to do or where to begin the work of reorganizing society and of rebuilding their ruined fortunes. Very few had any knowledge of free labor, or any hope that their former slaves would serve them faithfully for wages. On the other hand, the freed people were in a state of great excitement and uncertainty. They could hardly believe that the liberty proclaimed was real and permanent. Many were afraid to remain on the same soil they had tilled as slaves, lest by some trick they might find themselves again in bondage. Others supposed that the Government would either take the entire supervision of their labor and support or divide among them the lands of the conquered rebels and furnish them with all that might be necessary to begin life as independent farmers."

The work of attending to the physical wants of the poor, sick, and vagrant among this vast multitude was in itself appalling. Still, by cooperation with the medical department of the Army, aided by a flowing tide of charity from the loyal people of the entire Union, a great work was done. During the first year of the operations of the bureau, 1865-66, the death rate among the freedmen was reduced from 30 to less than 4 per cent. By August, 1866, 166,000 patients had been treated in 56 free hospitals and 5 orphan asylums. During four years more than half a million sick and infirm persons, absolutely dependent on charity, were thrown upon the charge of the bureau. In 1865, 148,000 people of both races were being fed and clothed and sheltered by the military authorities, and by the greatest effort at finding occupation the number was gradually reduced at a large saving of cost to the Government. During this period much suffering was brought upon all the Southern people from the failure of the crops, and the bureau distributed an appropriation of \$500,000 made by Congress for relief; the average number of persons daily assisted in 1867 being 31,105. More than \$250,000 worth of clothing was at different times distributed, the poorer white people sharing equally with the colored, without respect to their former loyalty. The Southern people were left in such a condition of general destitution that little help could be expected from their own State governments. Indeed, the entire legislation of the year when President Johnson was trying the experiment of reconstruction by executive edict, reads to-day like the action of a people bereft of their ordinary sense under the influence of a panic, which made a wise and humane conduct of public affairs impossible. The fact that amid such an indescribable confusion the vast majority of the able-bodied negroes became at once self-supporting is itself a tribute to the immense practical value of the bureau in the advice and direction of these bewildered and distracted people, to the general industry of the majority of the colored folk, and the constant personal private charity of the white population among which their lot was cast.

President Johnson, within a month after his accession to the Presidency, offered a wholesale pardon to all save 14 excepted classes of the Southern people, and held out such an encouragement to these excepted classes that 24 stout volumes of Government records of special pardons are now found in the Department of State. He then, by executive edict, invited the original voting population of all the ex-Confederate States to assemble in conventions, revise their State constitutions by the recognition of the freedom of the slaves, and at once proceed to set up their original forms of State government and elect Representatives to Congress. On

course, the 800,000 acres of abandoned lands thrown upon the charge of the Freedmen's Bureau, much of which had been leased to and cultivated and occupied by the negroes and yielding an annual income of \$400,000 were returned to their former owners. By 1869 there was practically no valuable real estate in possession of the bureau. This policy at once threw the 5,000,000 emancipated slaves upon the charge of the Southern people, generally upon the old proprietors of the plantations, never more than 2,000,000 of the 7,000,000 white people, for occupation and support. The severe labor and vagrant laws immediately passed by the new legislatures placed this entire colored population almost completely in the power of their old masters, and although Congress, in 1865-66, passed several laws suspending the operations of these local statutes, and a year later abolished all the new State governments, yet the relations of the President and the political party that supported him at the North with the dominant party in Congress during the earlier administration of the bureau put a premium upon disorder. Under these discouraging circumstances the Freedmen's Bureau performed a much needed work of reconciliation between the white and colored classes in the South, and so completely succeeded in a practical reorganization of labor that in these States the negroes raised a large proportion of the food that supported the white people, besides a large amount of rice, sugar, and tobacco for export and 200,000 bales of cotton each year, on which was paid into the United States Treasury in 1866-67 a tax of more than \$40,000,000. At the least it may be claimed that by the services of the bureau in this respect the United States Government was saved an amount equal to the \$13,000,000, which was the entire sum expended by the organization during the five years of its existence.

There can be no doubt also that a good work was accomplished by the Freedmen's Bureau in the administration of justice. Until the passage of the fourteenth and fifteenth amendments to the Constitution of the United States the negro, under the edict of the Supreme Court in the Dred Scott decision, was not a citizen of the United States, had no reliable standing in the courts of the South and, while in many districts exposed to constant bodily peril and impositions, in all his dealings he had little chance of gaining redress by appeal to legal process. The soldiers and sailors who with their families numbered a full half million of these people were in constant "peril among false brethren" from the infamous crew of land sharks that stood between the National Government and the claims of this class for service. While continually looking for the return to peaceful methods of redress for injuries through the ordinary agencies of justice, the excited condition of the people left whole States bordering upon anarchy. While the plantation class, who were the greatest sufferers, were by disposition and interest inclined to deal with their laborers with commendable fairness, the Southern country was thronged by gangs of ruffians who defied law and order and especially vented their rage on the unoffending freedmen. The Army could not well operate beyond the narrow limits of its local points of occupation, and much that was accomplished was the work of the agents of the bureau.

But, in the language of Commissioner Howard, "the most urgent want of the freedmen was education, and, from the first, I have directed more attention to this than to any other branch of my work." During the last two years of its active operation the work of the bureau was by law limited to the care of the schools. And it is impossible to estimate the value of what was accomplished in this direction during its entire administration. Previous to 1865 a great deal, as already shown, was accomplished by the various organizations from the North and the efforts of the Government through the military authorities. For a brief time in Louisiana, under the administration of General Banks, a system of schools for the freedmen was maintained by the taxing of the employers of their labor. The Freedmen's Bureau utilized the services of all the most experienced workers, General Saxton, General Eaton, General Armstrong, General Fisk, Superintendent Alvord, and

others—and by its appointment of a superintendent of education in each State, and subordinate agents in all districts of the country did much to bring order and a good method into the school work and restrain wasteful and misdirected activity. While compelled to work with sparse appropriations for education from Congress, the Government did, indirectly, in many ways contribute largely to this fundamental work of laying the foundations of a true American civilization on the ruins of the old-time local and aristocratic order.

During the first seventy-five years of the national life, including the Revolutionary period, the South had been a great contributor to the upbuilding of the Union. First, through the contribution of a group of remarkable statesmen and the mighty leadership of Washington, it identified itself forever with the beginnings of republican government. Second, by its statesmanlike and patriotic policy of placing the entire domain of the original Northwest in charge of the National Government and cooperating in the dedication of one thirty-sixth of it to the schooling of the children and youth of the new States, even to the neglect of the six original Southern Atlantic States in a munificent distribution of educational lands. Third, it was under the far-sighted administration of a Southern President, Thomas Jefferson, that the purchase of the immense Louisiana Territory from France, which extended the area of the Republic to the Rocky Mountains in the Northwest, was accomplished. Fourth, the series of operations, including the annexation of the Republic of Texas to the Union, the Mexican war, and the acquisition of the magnificent Pacific coast empire were largely the result of Southern statesmanship, in the face of constant protests, especially from the Northeast. The previous acquirement of Florida gave to the Union a significant outstretched finger pointing to the West Indies. And it must never be forgotten that the two most powerful States of the southwestern border, besides Maryland, Delaware, and the new State of West Virginia, never revolted from the Union, and furnished to its armies a larger body of effective fighting men than had ever been marshaled on the Western Continent, including a group of the most distinguished commanders in the National Army and Navy.

The future historian will add to this distinguished record the prodigious service rendered popular education by the hearty cooperation of the great Southern statesmen of the Revolutionary period in the dedication of the first national land grant for universal education, a proposition originating from the Virginia group of the fathers and more and more coming to be regarded one of the most valuable of the contributions of this body of great men to the general welfare of the American people. The indirect influence of the educational scheme of Thomas Jefferson has never been fully understood, even in the South. First, it originated the movement of the common school in the Southern States, which, during the eighty years from Yorktown to Appomattox, made persistent headway in the development of an influential educational public, including large numbers of the foremost men of all these States, which demonstrated its power in repeated efforts to establish the common school for the white population. In 1860 three of these States had on the ground a proper common school, and a dozen of the leading cities of the section were in accord with similar communities in the North in the support of the system. During this period, following the lead of Virginia, anticipated by North Carolina and Maryland, the majority of these States had established the State university, which is the crown of the common-school system. The University of Virginia was largely influential through its unsectarian and broad scheme of organization in giving the initiative to the State universities of the Western and Pacific States. Meanwhile, a most valuable educational literature, really the best Southern contribution to the national literature, had been developed during these years, which the younger school men of the South are now engaged in editing and introducing to its proper place in the national libraries at Washington.

The historian will not fail to do ample justice to the great service rendered by

the North and the nation to the complete realization of the American idea of universal education by the opening of the great front door of the common school-house to the admission of one-tenth the entire number of American children and youth, the descendants of the 5,000,000 negro slaves emancipated by the civil war. This work, not only under the direction of the National Government but still continued through the agency of the Northern churches and private contributions, forms one of the most interesting chapters in the history of American education. But it should be remembered that it was not the North nor the nation but the South, acting through the ordinary channels of State, municipal, and rural legislation and administration, that completed the great circle of the American system by everywhere admitting the children of the freedmen to equal opportunities in the common school as early as 1875. The story of the treatment of the negro child and youth, even later than this date, in several of the States, as far as relates to educational opportunity and encouragement, is not one on which even the most enthusiastic educator of this section is anxious to dilate. And whatever may have been the influence of Northern educational effort in these States since the war, it can not be compared with the prodigious significance of the action of all these States during the last twenty-five years in building up that side of the American common school which is the final demonstration to the world of the possibility of the education for responsible citizenship of every order and condition of the human race.

It may not be out of place here, at the close of the record of the proper national work in the preliminary stages of the elementary schooling of the negro during the fifteen years from 1860 to 1875, to place before the reader a late official statement of the present condition of common schools for the colored race in the majority of the Southern States, by Dr. J. L. M. Curry, general agent of the Peabody and Slater educational funds, in his report of the latter for 1898. Referring to what has been accomplished by the South in this respect, after ample justice done to the previous efforts of the North and the nation, the Doctor says:

At immense cost, considering their diminished resources, have these States undertaken and partially accomplished this Herculean task. To illustrate the burden and patriotism of the school system, examples may be cited. North Carolina paid last year for education of white children in public schools \$173,466 and for the negro children \$246,946. Of taxes on real and personal property for schools, the whites paid \$402,839 and the negroes \$14,748. Of the taxable values in the State, the negroes own \$880,074, which is about one twenty-ninth of the whole. In the State, the negroes of school age are 211,519; attending school, 131,404. The school law requires the terms of all public schools to be as nearly as possible of the same length without regard to race, and the average school term of the whole State is 10.86 weeks. This does not apply to schools sustained in part by local taxation. The number of negro teachers is 1,652, with an average salary per month of \$23.68. In Florida the negroes of school age (6 to 21) are 66,402, of whom 39,502 were enrolled, with an average attendance of 25,854. The expenditure for negro schools in 1896 was \$153,292, State funds being apportioned to the counties on the basis of average attendance without regard to race. Average length of session in 1897 was 98 days. Negro teachers, 642, with an average salary per month of \$29.50. Total value of negro school property, \$117,845. The State Normal School, well equipped, with over 200 colored pupils, is provided for by the State, independently of public-school funds. In South Carolina there is no school census of children (6 to 21), but the United States census shows (5 to 20) 313,249, of whom 139,156 were enrolled. The teachers numbered 2,025, with an average salary of \$18.90 per month. The schoolhouses numbered 1,766, of which 972 were owned by the State, with a value of \$116,156. The average length of session was 3.84 months. The expenditure for negro schools, \$175,374. The State has an agricultural and industrial college at Orangeburg with 500 students. The colored school population in Virginia (5 to 20), 263,703; enrolled, 123,231; average attendance, 68,203; months taught, 6.1; teachers, 2,127; schoolhouses, 1,885. The State has also a normal and industrial school for colored people.

In Tennessee the negroes of school age number 182,214; attendance, 61,744; teachers, 1,679. The length of sessions and pay of teachers vary in different localities. In Arkansas, negroes of school age, 127,736; in attendance, 82,192; average

length of session, 70 days; teachers, 1,564; pay, according to grade, from \$15.20 to \$23.35; value of negro schoolhouses, \$120,000. School funds are distributed according to the number of children of school age without distinction as to race. The negroes of scholastic age in Texas number 187,316; the average attendance at school, 139,698; school term, 4.45 months; negro teachers, 2,747; average compensation for school term is \$202.07; value of negro schoolhouses, \$607,441.50. School funds are distributed pro rata as per the scholastic census, impartial provision being made for both races, the schools being maintained the same length of time each year for the two races. In Alabama the negroes of school age (7 to 21) are 277,173; in attendance, 132,313; general average of session, 87 days; teachers, 2,466; average salary per month, \$20.93; school property estimated at about \$460,000. There are two normal and industrial schools, with 1,330 pupils. Georgia has 289,931 negroes of school age, 156,650 attending five months' sessions; 3,799 teachers with average salary per month of \$21.10; negro schoolhouses owned by county boards outside of cities, \$9,811. School funds are distributed per capita. In West Virginia the number of negroes of school age is 12,528, of whom 7,481 attend school; teachers, 233; average salary per year, \$212.49. There is no race distinction in the distribution of the State's school funds. In Mississippi, out of a total enrollment of 367,579, 196,768 are colored. The State appropriates \$923,500 for the maintenance of schools, and the distribution is pro rata according to enrollment. There are two normal and agricultural schools, with State control and support. Louisiana reports 960 schools; an enrollment of 71,609; average attendance of 49,670; 1,019 teachers; average school term, 4.62 months; average salary per month, \$23. School funds are prorated according to the number of educable youth. There are 73 private schools, with 1,757 pupils. The State superintendent says it is impossible not to see everywhere in Louisiana the great improvement in the mental and moral condition of the colored people during the last seven or eight years. In every one of these States, except Tennessee, there are normal and industrial schools sustained from the public revenues.

It is only by a knowledge of these facts in the civic and educational history of the South that the educational public at home and abroad can comprehend the great movement in behalf of universal education through all these 16 States during the past twenty-five years. In the light of these facts, it is seen that in education, as in politics, American society in these States has repeated itself. It was through the colonial experience of a century that the group of conservative Englishmen who were thrown especially upon the colony of Virginia by the collapse of the Stuart dynasty in England came forth in Washington and the majority of his great compatriots in 1776, fully abreast of the corresponding body from radical New England and the middle colonies, to fight their way out from European control and inaugurate the new departure of the ages in the Government of the United States. In like manner a similar class in every Southern State, reared under the influence and to a considerable extent by the actual contact with the educational system of Great Britain of half a century ago, appeared at the close of the civil war not only prepared to establish the common school for its own race, but also for the race that up to that date had nowhere heartily been accepted as "having any rights" in the American schoolroom "that the white man was bound to respect." It was one thing that in the majority of the States of the North even the small contingent of colored children and youth were not admitted without protest as early as 1860 to equal educational privileges with the dominant race. It was quite another venture when the 16 former slave commonwealths rose up from the awful calamities of the greatest civil war of modern times, and in their poverty assumed for a full generation almost the entire support of the schooling of the freedmen, with probably no more opposition at home than was encountered in several of the most powerful and wealthy of our Northern States in the final establishment of the free common school not later than seventy years ago. It would have been regarded as philanthropic prophecy run mad in 1860 had it been declared that within twenty years the Southern people would have established the entire American system of universal education, with its colored "annex," by placing on the ground a system of free common schools for all classes and both races and supporting them at an expense of nearly \$500,000,000, includ-

ing nearly \$100,000,000 for the children of the freedmen. But in the preliminary stages of this great work, as far as relates to the negro, the Freedmen's Bureau must be credited with a good share of the important work during the period immediately following the close of the civil war—the time of special peril for the cause of the new education in the South. By its cooperation with the church and private agencies and the rising educational public of the South as a Government bureau it did a good work in helping to secure the placing in the constitutions of every reconstructed Southern State a provision for the common school as early as 1875.

The moneys directly expended during the five years of the administration of Commissioner Howard probably did not exceed \$3,000,000, including the cost of transportation and other forms of indirect aid, an amount no greater than is now paid annually by several of our Northern cities. But it is doubtful if \$3,000,000 were ever put out at interest in a way more remunerative to the investor since this world was made. By the method adopted, in working in connection with the organizations and agencies already on the ground, the bureau "was able to give material aid to all engaged in the educational work, to harmonize the numerous independent agencies in the field, and to assist all impartially." And in doing this, as a governmental agency, it was not only a beneficent influence, assisting in the reconciliation of sectional and local jealousies among the great variety of associations and individuals concerned in the movement, but was all the time directing the attention of the freedmen and poorer white people of the South to the only final source of supply for the great need of this section—a system of public schools for all orders and conditions of its population, supported and supervised by the whole people.

With all the zeal and unsurpassed generosity of giving developed by the loyal people, backed by the consecrated service of the best men and women of the country as teachers, the Freedmen's Bureau was never able to reach directly more than one-tenth of the children of the freedmen. It is a remarkable fact that during the earliest period of schooling the children and youth of the race their parents seemed to have been more ready to contribute money than to-day, when their circumstances are so much improved. In the year 1869 it is estimated that out of their little store the freedmen paid \$200,000 for school buildings and the support of teachers. Many of the schools in the rural districts were entirely supported in this way. The wide dispersion of the service of the bureau practically covered the beginnings of education for the colored people through the entire area of the South, as the border States that remained in the Union—Maryland, Delaware, West Virginia, Kentucky, and Missouri—were included in its field of operation. It is impossible to estimate the indirect effect of such a movement on the entire body of more than 5,000,000 for the first time in the history of this race introduced to the education that comes from the contact with letters and schools.

It was greatly owing to the influence of these teachers and the contact with the more intelligent soldiers during the war that the negroes seem at once to have taken up the idea that school education was the great lever by which their people were to be lifted to prosperity, power, and competent citizenship. There was little just then to awaken or encourage this notion among the people of the South. The old prejudice against schooling any laboring class was still very powerful and for several years greatly interfered with the efforts that were made. But during the five years that preceded the final reconstruction of these States and their permanent reincorporation into the Union so much was done that the colored people in every State for several years, in some of them the more numerous voting class, insisted on a public provision for general education. This, of course, brought with it the same demand from the masses of the white people, a considerable portion of whom were virtually in a state of illiteracy. And with all the events of this period of reckless experimenting with their new-found citizenship,

there is little doubt that in this helping to "force the fight" for the common school and place on the ground a State system of public instruction, the negro conferred a benefit on the South that far exceeded the losses of the vexed period of reconstruction, of which so much is yet said with a great deal of exaggeration.

And it is morally certain that without the cooperation and material aid of the Freedmen's Bureau it would have been impossible that the generous provision for the secondary, higher, and professional training of superior colored youth, which contributes such an important element to the education of the colored race, could have been made, at least without postponement for many years. It was the aid extended by this friendly agency that first placed the Hampton Normal and Industrial Institute on its foundations and called Gen. S. C. Armstrong to its presidency. The Howard University at Washington, D. C., was another of its early beneficiaries. Nearly all of the twenty or more of the "colleges" and "universities" for colored students now in operation and still largely supported by Northern beneficence, date from the period of the Freedmen's Bureau, and but for its timely aid would probably never have been considered possible. The rise of these schools and the demonstration made in them by a generation of training in the secondary, higher, and professional departments of instruction, especially in the preparation for teaching, has largely influenced all the States of the South in extending their system of common schooling for colored youth beyond the elementary grade, even doing what the British Parliament still refuses to do for the children of British subjects, including the free high, the State normal, and the industrial departments with the beginnings of the higher education in its superior schools.

During the existence of the Freedmen's Bureau the Peabody education fund was organized by the gift of \$3,000,000 from George Peabody and the appointment of Dr. Barnas Sears, the successor of Horace Mann in the superintendency of public instruction in Massachusetts, and for many years a distinguished educator in the collegiate and theological seminaries of New England, as its general agent. Dr. Sears took up his residence in Staunton, Va., and gave the last twelve years of his life to this work, which more than the efforts of any one man or group of men or institutions supported from the North made the present condition of popular education in these States a possibility. Dr. Sears at once put himself in connection with the Freedmen's Bureau and freely utilized the organization in doing the preliminary work of his great mission. Indeed, the public schools that were supported or substantially aided by the Peabody fund were, for a time, nearly all that were in operation in the Southern States.

The entire system of school education, private, denominational, and public, existing in the eleven ex-Confederate States before the war went down in the general wreck of the Confederacy. With the exception of the schools of a few cities and some institutions of a superior grade, there was little that deserved the name of a general system of schooling in the South during the ten years between 1860 and 1870. The Peabody educational fund, under the wise and inspiring administration of Dr. Sears, touched to a new life many of the feeble beginnings of the common schools and supplemented the work of the Freedmen's Bureau for the colored folk. Its supervision of education for this race in all these States aided materially by advice and active cooperation in dispensing the limited means of the Peabody fund in the hands of Dr. Sears. And it was a great point gained that while the bureau representing the National Government was operating so largely on the line of establishing the common school for the negroes, the Peabody fund concentrated its work entirely upon the upbuilding of public education for all children, and later especially directed attention to the training of teachers for the common schools of both races.

When the complete history of this period of fifteen years, from the opening of the civil war to the final return to political power of the Southern people in 1876,

is written it will be seen that in no manner has the good Providence in the soul of calamity been so manifested to the South as by the early participation in the education, especially of the emancipated slaves, of the Government of the United States and the loyal people of the North. We already have shown, without fear of contradiction, that it was this great movement that at once decided the attitude of the Southern people of both races and all classes in regard to the common school, and even amid the tumults of war brought the schoolmaster and schoolmistress to the front as the final reconciler of all classes and sects and both races, in the hostile section of the Union. By the expenditure during these years of probably \$50,000,000 and the immediate direction of a cooperation with the teachers in their work to combine instruction in letters with the training in good morals, free labor, and competent citizenship, it called the attention of the ruling Southern classes, especially the planters and superior people, to the plain facts of the situation. Under this influence and the improved method in the educational training of children, the public school party, that had been growing stronger during the entire previous generation in the South, was able to take advantage of the situation and compel the adoption of this as the only practical expedient for the general enlightenment. Of this movement for the uplifting of the younger classes during the civil war of which we have now written, the Freedmen's Bureau could say with truth: "All of which I saw and part of which I was." The influence of public schooling is perhaps even more powerful and far-reaching in awakening the desire for improvement and progress among the masses of an illiterate people than in the immediate effect of the knowledge and mental and moral discipline imparted to any one generation of children and youth.

The pessimistic cultivated critic may look with indifference or open contempt upon the apparently slight result of the schooling of the colored and humbler white people of the South during these fifteen years of the war and reconstruction, but when he declares that the result of this was, and continues to be, the educating of several millions of people "above their sphere in life," he gives away his entire argument. For it is just this, the filling of the souls of every new generation of American youth with a deep discontent of the condition into which they were born and a restless aspiration for a better and grander life than has yet been realized by the fathers, that popular institutions are maintained and American society is replenished, reenforced, and strengthened to bear the increasing burdens that must be shouldered by every new generation as the years go on. During the past one hundred years of the national life the negro population increased from 700,000 in 1790 to 7,000,000 in 1890. With no desire to undervalue the remarkable development of the colored race during its two hundred and fifty years of American slavery it can truly be said that the thirty years of schooling, with all that goes therewith, since 1865 have done more for the general awakening and informing of this people than any or all other human influences.

It may be questioned whether the social and political opportunities offered to these people have yet been realized to the complete satisfaction of those who gave the earnings of a generation and the lives of half a million that liberty might be "proclaimed throughout the land to all the inhabitants thereof." But one of the most competent observers and broad-minded educators and religious thinkers of this entire Southern region, the late Bishop Atticus Haygood, writes concerning the great experiment of educating the negro as early as 1884. After such words as the following from such an eminent source, we may believe that here has been realized a success that is the prophecy of things prepared in the providence of God for this race of people through all the centuries to come.

Says Dr. Haygood, in one of the early reports of his secretaryship of the Slater education fund, in 1884: "The colored schools are in every respect better than was reasonably expected, when the experiment began, to be seen in twice twenty years.

* * * The colored race in schools is capable of furnishing its own teachers.
 * * * No amount of money, no perfection of method, no expenditure of energy can at once or within a generation or two or three generations surmount the difficulties that inhere in the heredities and the social conditions that make the case of the negro in the Southern States what it is. * * * The right principle of action, when a great and necessary work is to be done, and it is not only difficult but of such a nature that it must take a long time to accomplish it, and it is so connected with the very roots of social order and progress that failure means disaster, is that the sooner the work is begun and the more earnestly it is pressed the better for all concerned." He freely speaks of the educational question connected with the negro as "a problem without a mystery," and continues, "in no possible sense has the great effort at educating the negro been a failure. It has, judged by any vital test, been a marvelous success. There is no mystery apparent in the education of the negro race if the work is ever done as the best of teachers of both races agree that it be done. The time must come when the Southern white people cordially can cooperate in the work. It would be as easy to develop a colony into a great State by immigration alone in a country without births as to permanently establish and successfully conduct a great educational work by supplies from abroad. The interest of the white people in making the negro a good citizen is only less than the interest of the negro in his own elevation."

But the educational work now briefly described among the freedmen, for the ten years following the election of Abraham Lincoln to the Presidency and the outbreak of the civil war, was only the first step in the great experiment of the establishment of the American system of universal education in all the States of the South, which is the theme of the present essay. The next step in the great civic and social drama enacted during the momentous thirty past years was the introduction of the freedmen to complete political citizenship by the final scheme of reconstruction, from 1869 to 1876. The last of these seceding States of 1861, with every Southern State that had hitherto neglected to make a distinct recognition of and provision for the common school, joined the remaining States of the Union by placing a decided and elaborate article in its fundamental law adopting the entire scheme of American universal education. Beginning with the new State of West Virginia, in 1863, this great act was completed only by the final acceptance of all the late ex-Confederate States of the terms of political reconstruction in 1870.

THE PEABODY EDUCATION FUND.

But all this placing of elaborate provisions for the establishment of the common school in the constitutions of the reconstructed States of the South, completed by 1870, and the immediate passage of public-school laws and the action of the State governments during the following troubled six years, might have failed to realize their intention had not the good providence that, from the outbreak of the civil war in 1861 up to the present day, has served to keep watch and ward over the 3,000,000 children and youth of these 16 States, put it into the hearts of many good men and women, the Government of the United States and the churches of the North, to retain a deep and fruitful interest in their educational welfare. It would be a great injustice to these influences and agencies from without and an inexcusable lapse in the correct history of the common schools in the South during this critical period of the last thirty years to omit at least a sketch of this remarkable series of cooperative movements, several of which are still in full activity, and all now fully recognized by the competent educators of that section as legitimate and praiseworthy in their bestowal and honorable in their reception.

The first of these, which even anticipated the establishment of the common-school systems in the ex-Confederate States during the ten years of the final period of reconstruction, was the Peabody education fund. The publication of the admirable volume narrating the complete history of the inception and development of

this, one of the most unique and successful charities recorded in modern history, by Dr. J. L. M. Curry, the distinguished general agent of this and the John F. Slater education fund for the colored race, with an elaborate memorial paper on the life of Hon. Robert Charles Winthrop, the president of the board of Peabody trustees until his death, published in the Report of the national Bureau of Education for 1893-94 by the author of this essay, relieves this historical record from the necessity of a detailed account of its great achievement through the thirty years from 1867 to 1897. Yet so intimately connected is the Peabody education fund with all that was done, especially through the critical years of the establishment of the common-school system in these 11 States, that some account of its operations is absolutely necessary to a correct understanding of Southern educational affairs.

To appreciate the necessity for the appearance of some new agency, sufficiently powerful and attractive to the more influential class of the Southern people through them to lift and hold the attention of the entire section above the tumults and contentions of public and the discouragements and exasperations of private life, until a permanent foundation had been laid for the education of the children of the South, we have only to turn to the impressive words of the author of this volume. Says Dr. Curry: "At the origin of the fund not a single Southern State within the field of its operations had a system of free public schools, and only in a few cities were any such schools to be found. No State organization existed through which this fund could reach the people. The illiteracy of the inhabitants was appalling, and by no means was confined to the freedmen, but included a large per cent of the white population. * * * The legislatures of these States, during the period of reconstruction, largely under the influence of members from Northern States, where the common schools had been for years a recognized institution, and of colored representatives who were filled with a laudable ambition for the schooling of the children of their own people, had laid out a work entirely and sometimes absurdly beyond the ability of their people to sustain. For the support of this scheme was to fall upon the native white people, who held 90 per cent of the remaining property of these Commonwealths. During the war and the five years following—1860 to 1870—the property values of these States had diminished to the extent of nearly \$2,000,000,000. There were in the ex-Confederate States 2,000,000 children and youth within the years of instruction." And it must be remembered that the outbreak of the war had practically closed the schools of the States engaged in it, even largely affecting those of the five border States which remained in the Union. Probably an entire generation of Southern children had come up during this period with the most meager opportunity for obtaining even the elements of schooling. Children of the superior class, left at home during the four years of conflict with the negroes and the women, in the condition of fearful excitement and apprehension that involved every Southern home during these terrible years of clouds and darkness, must have often been neglected. A great deal that is now recognized and deplored as the shadow side of life in some of these States is the direct result of the enforced absence of proper home, school, and church influences upon this generation, now the people of the most active age in the management of private and public Southern affairs.

Well does Dr. Curry say:

In the effort to organize and put in successful operation a new and untried system of public schools adequate to the needs of the entire population, the Southern States were under a weight of debt beyond their ability in their impoverished condition to pay. To add the expense of free education to this crushing weight was, in their financial condition, a perplexing and almost impossible task. Free schooling was a new question, introduced and to be administered by novices in this work. To organize the freedmen—the equality of citizenship of a large class, lately the slaves of the white people—was not easy, because in conflict with the traditions, prejudices, social customs, and legal rights of a few years preceding.

To impose voluntary heavy burdens on the scant property which survived the demoralization of the war so as to educate gratuitously their own children and the children of the late African slaves, was a test of patriotism, of humanity, of civic duty which no other people ever encountered. * * * These States courageously undertook the work, levied taxes on property, more than 90 per cent of which belonged to the white citizens, for the establishment of a dual system of schools, giving like and equal advantages to both races; and there was, of consequence, a muttering of discontent, a complaint of overtaxation, a controversy upon the efficiency of inchoate schemes, and efforts to overthrow the education which was unfamiliar to teachers and people.

To further complicate the situation, the agencies which had wrought for the promotion of order, industry, and intelligence, especially among the emancipated negroes during the progress of the war, had been withdrawn or were acting against an almost insurmountable resistance from a large class of the Southern people. The Army was still present in its most exasperating relation, sufficient to be a constant source of popular irritation, but not strong enough in numbers to protect anybody outside of a military post. The Freedmen's Bureau, through its educational operations, was regarded rather as an officious agency from without than an ally of the home educational public, and at best would only look to the reconstructed State governments regarded as usurpations for the aid and comfort necessary to its effective action. It is doubtful if any demonstration, however patriotic, conciliatory, and powerful for good, made from the North or the nation would have met a response in a condition, now well appreciated, but then regarded by the loyal people of the country as an unreasonable and almost treasonable prolongation of a state of practical civil war.

It was then that George Peabody, "moved by the Holy Ghost," came to the rescue "of the suffering South for the good of the whole country." George Peabody, in his large and generous personality, appeared to the Southern people as a representative of the entire civilized and Christian world rather than of the North or the nation. By the Northern people he was recognized as a genuine son of New England and a decided friend of the Union, who had never withdrawn from his American citizenship or even placed his name in a London directory, a representative of all that was noblest and most lovable in the highest realm of society in the free States.

George Peabody was born in that portion of the old town of Danvers now known as Peabody, Essex County, Mass., February 18, 1795, of poor but thoroughly respectable parents. His only education in letters was in the New England district common school of that early day. At the age of 11 he was apprenticed in an old-time New England country store. At 14, he "moved on" to Vermont according to the original form of "going West," for a New England boy at the beginning of the century. He soon returned to the village of Newburyport, Mass., where he remained till "of age." A fire that "burned him out" was the good providence that sent him to an uncle in Georgetown, D. C. As the young "traveling man" of a firm of merchants in this little city he formed a close acquaintance with the people of the neighboring States of Virginia and Maryland that gave him a permanent attraction to his new home. Promoted to the active partnership of a larger establishment in Baltimore, Md., he accumulated there the first \$5,000 that proved the corner stone of his, at that time, great fortune of \$15,000,000. As a "home guard" he shouldered arms in defense of Washington, D. C., in the war of 1812. In 1827, at the age of 32, he first saw London and ten years later, at 42, he was established there as a banker and general operator in exchange.

In his early manhood, as he tells us, he formed a resolution to devote the major part of his fortune to some act of charity and education. He lived unmarried, always with a becoming simplicity, but with a cordial hospitality to his visiting countrymen in London that gave him troops of friends on both sides of the water. By his one financial operation in behalf of his adopted State, Maryland, and an

active cooperation in the representation of the United States in the first great industrial exposition in London, he became widely known.

At the age of 52 he entered upon a public career of charity that at his death, in 1869, left him one of the most honored and beloved of any men in Christendom. A plain American countryman, he was borne to his burial with more than kingly honors, the three great powers of Europe—England, France, and Germany—uniting in the naval escort of his body across the Atlantic; as it were, Christendom rising up to hail an example of practical Christianity so complete. Well might Victor Hugo declare him that “great citizen of the world and brother of mankind.” His larger bequests began in 1852 by his gift of \$2,500,000 for the development of self-helping manhood and womanhood among the poor in London. His system of tenement houses, rented to the most deserving in straitened circumstances, has already so enlarged its own sphere of operation that it may, as he predicted, ultimately become the solution of the awful problem of poverty that for a century has baffled the vast charities and challenged the executive genius of church and state in Great Britain.

The record of the numerous timely and well-considered gifts which extended over the remaining twenty-six years of his life consumed \$10,000,000 of Mr. Peabody's fortune of \$15,000,000, without injustice to even the distant relatives of his own family. One of these gifts was a memorial church, built in commemoration of his mother, in his native town.

After long and confidential correspondence and consultation with the most reliable American advisers, George Peabody, on an October day in 1866, at the charming suburban home of Hon. Robert C. Winthrop, in Brookline, Mass., seated under the portrait of Benjamin Franklin, opened his “leathern wallet,” a veritable budget of blessings, which contained the securities and documents connected with what was then the greatest and most fruitful gift to popular education in the history of the world. It consisted of \$1,000,000 in reliable securities and \$1,500,000 in such as were esteemed by himself as certain of future recognition, the whole sum to constitute a permanent fund to be administered by a board of sixteen trustees, nominated by himself, with provision for permanent corporate existence, for the education of all classes and conditions of the children of the Southern States most in need of aid. While confined for the present, for good reasons, to the ex-Confederate States, it was the desire of the giver that at the final distribution of the fund, in thirty years, it should be so handled as to include every State of the South in its benefactions. The board of trustees was chosen with great wisdom. Indeed it would have been difficult to name a list of sixteen men then living in the United States who represented more of the general ability, wisdom, and worth of the country. It was notable, however, that it did not include the name of any distinguished professional teacher, but was selected from the men who in public and professional life best represented the entire American people. This original board of trustees contained the following names:

THE BOARD AS ORIGINALLY APPOINTED BY MR. PEABODY.

Hon. Robert C. Winthrop.....	Massachusetts.
Hon. Hamilton Fish	New York.
Right Rev. Charles P. McIlvaine	Ohio.
Gen. U. S. Grant	United States Army.
Admiral D. G. Farragut	United States Navy.
Hon. William C. Rives	Virginia.
Hon. John H. Clifford.....	Massachusetts.
Hon. William Aiken.....	South Carolina.
Hon. William M. Evarts.....	New York.
Hon. William A. Graham	North Carolina.

Charles Macalester, esq.....	Pennsylvania.
George W. Riggs, esq.....	Washington.
Samuel Wetmore, esq.....	New York.
Edward A. Bradford, esq. (resigned).....	Louisiana.
George N. Eaton, esq.....	Maryland.
George Peabody Russell, esq. (resigned).....	Massachusetts.

The vacancies created by death or resignation have been filled by the election of—

Hon. Samuel Watson.....	Tennessee.
Hon. A. H. H. Stuart (resigned).....	Virginia.
Gen. Richard Taylor.....	Louisiana.
Surg. Gen. Joseph K. Barnes, U. S. A.....	Washington.
Chief Justice Morrison R. Waite.....	Washington.
Right Rev. Henry B. Whipple.....	Minnesota.
Hon. Henry R. Jackson (resigned).....	Georgia.
Col. Theodore Lyman (resigned).....	Massachusetts.
Ex-President Rutherford B. Hayes.....	Ohio.
Hon. Thomas C. Manning.....	Louisiana.
Anthony J. Drexel, esq.....	Pennsylvania.
Hon. Samuel A. Green.....	Massachusetts.
Hon. James D. Porter.....	Tennessee.
J. Pierpont Morgan, esq.....	New York.
Ex-President Grover Cleveland.....	New Jersey.
Hon. William A. Courtenay.....	South Carolina.
Hon. Charles Devens.....	Massachusetts.
Hon. Randall L. Gibson.....	Louisiana.
Chief Justice Melville W. Fuller.....	Washington.
Hon. William Wirt Henry.....	Virginia.
Hon. Henderson M. Sommerville.....	Alabama.
Hon. William C. Endicott (resigned).....	Massachusetts.
Hon. Joseph H. Choate.....	New York.
George W. Childs, esq.....	Pennsylvania.
Hon. Charles E. Fenner.....	Louisiana.
Daniel C. Gilman, LL. D.....	Maryland.
Hon. George Peabody Wetmore.....	Rhode Island.
Hon. John Lowell.....	Massachusetts.
Hon. George F. Hoar.....	Massachusetts.
Hon. Richard Olney.....	Massachusetts.

Hon J. L. M. Curry, honorary member and general agent.

Since the publication of the above list, in 1898, Hon. William M. Evarts, the only remaining member of the original board of trustees, and its president, is deceased.

The first meeting of the board of trustees was held at Washington, D. C., in Willard's Hotel, on February 8, 1867. The venerable Bishop McIlvaine, of Ohio, invoked the divine blessing, General Grant devoutly kneeling by his side. The selection of this board of trustees was a master stroke of the executive wisdom that at once includes and rises above policy. Probably there has never been in any country a working board intrusted with great educational funds that represented so varied and in almost every person so eminent an array of high character, ability, and large experience in affairs, combined with distinguished public station. During the past thirty years it has included three Presidents of the United States, two Chief Justices of the Supreme Court of the United States and several distinguished members of the State judiciaries, famous military and naval commanders of the Union and Confederate armies, including General Grant and Admiral Farragut; lawyers like Lowell, Evarts, Choate, and Clifford; financiers like Drexel,

Childs, and Morgan; the ideal Southern gentlemen of the old time in Governor Aiken, of South Carolina; statesmen of the same period in Gibson and Rives; distinguished gentlemen of cultivated leisure in Eaton, Bradford, Russell, and Macalester; public men like Lyman, Endicott, and Olney, Mayor Courtenay, of Charleston, S. C., and Manning, Somerville, Watson, Porter, and Jackson from the South; two bishops of the Protestant Episcopal Church—McIlvaine and Whipple; the learned secretary of the Massachusetts Historical Society, Dr. Greene, Hon. William Wirt Henry, of Virginia, and among the later members President Gilman, of Johns Hopkins University, and Senator George F. Hoar, of Massachusetts. During the thirty years of its operation 47 gentlemen have served on this greatest of common-school boards, and of the 16 regular members no meeting has failed for lack of a quorum, on one occasion President Grover Cleveland having held himself in reserve amid important duties in Washington to go to New York to fill a possibly vacant chair.

At once the necessity was realized of appointing a competent agent, to whom should be intrusted the practical administration of the gift. Here the wide acquaintance with distinguished men possessed by Mr. Robert C. Winthrop, who, during the remaining twenty-seven years of his crowded and beneficent life, remained the president of the board, stood the new enterprise well in hand. As chairman of the committee on education in the legislature of Massachusetts in 1837 Mr. Winthrop had been largely influential in the educational new departure that called Horace Mann to the leadership of the great revival in the common school system of the State and the Union, and he also brought in the bill to the legislature for the establishment of the first State normal school in the United States, at Lexington, Mass. He turned at once to President Barnas Sears, of Brown University, Rhode Island, who, in 1848, had been appointed the successor of Horace Mann in the office of secretary of the board of education of Massachusetts, practically the superintendent of public instruction, for consultation and suggestion. The reply of President Sears, in a remarkable document outlining a policy for the board of trustees, confirmed the belief of all that he was the man whom Mr. Winthrop well named "a perfect pilot of a perfect scheme." After careful consideration Dr. Sears resigned the presidency of Brown University, a position in which he declares "my duties are a perfect luxury and my associates all I could desire," for a work that might well have appalled the courage and tact of any living educator. In March, 1837, he accepted the call, removed to Staunton, Va., and for the remaining twelve years wrought a work whose originality, difficulty, and success will establish his reputation as one of the great educational statesmen of modern times.

At once the question came up of the fit method of distributing this munificent gift. Mr. Peabody had already fixed a long term as the limit of its activity in the provision that after thirty years the board of trustees, by a two-thirds vote, could decide to administer the fund for the best interests of education in every Southern State. He had also expressed the wish that the money should be used in a way to benefit as many students of limited means and all classes as was possible under existing circumstances. Dr. Sears, by long service in many varieties of educational institutions, from the country district school of New England, through collegiate and professional seminaries, and as a State superintendent of public instruction, was a most competent adviser. After a careful study of the situation at "short range" for three months, by consultation with the best informed friends of education in the Southern States, he presented to the board, in session at Richmond, Va., in 1868, a programme which so commended itself that after a thorough discussion and comparison of views it was adopted and became the policy of an administration which has probably achieved a greater educational success than was ever realized before from an invested capital of \$2,000,000.

This plan, as outlined by Dr. Sears to the board, was, in brief, the most thorough

preparation for the immediate establishment of the American common school in every Southern State. It proposed to assist in the establishment of common, free public, in distinction from private denominational or corporate, schools, as the chief educational centers of the section. Each school should be located where its influence would be most extensively felt, where the community could be induced to aid in its foundation and permanent support, the best teachers could be obtained, and the most approved methods of school organization, government, and instruction could be illustrated. As far as possible, at once, the fund should be used in connection with the State governments. Where no system of public schools existed, the efforts of the agent should be in the direction of establishing this great desideratum. It required no little courage, executive energy, and tact to reject the numberless influential appeals for educational aid to existing institutions, on the lines of the old-time system of denominational and private academies and colleges adapted to the wants of the superior class. Here came in the "saving common sense" and broad statesmanship of the board, composed of men of extensive experience in public affairs and well aware of the state of public opinion among the most thoughtful people of the country. After deliberate consultation this scheme, with the urgent advocacy of General Grant, was adopted as the policy of administration, and hereafter the name of George Peabody will be associated with the foremost educators of the complete system of American universal education for every class in every State of the Union.

At the third meeting of the board of trustees, in the city of New York, May 28, 1867, the act of incorporation granted by the legislature of that State was presented, an organization under the charter was perfected, and a common seal for the corporation authorized.

The wisdom displayed in the choice of Dr. Sears as the general agent of the board at once became apparent. Few men summoned to the "high calling" of reconciliation between the people of the two sections of the country, so long becoming estranged and so fiercely contending during four years of the greatest civil war in modern times, have been so eminently fitted by temperament, education, experience, and a rare combination of intense consecration and an almost microscopic faculty for managing details, with a cosmopolitan habit of far-reaching observation and the ability to put himself in the place of every man or community with which he was called to deal, as Dr. Sears. Well does his successor, Dr. Curry, express the universal judgment of the country on this matter in his statement that "the history of education in the South would have been very different but for the wonderful skill and ability with which Dr. Sears, transferring his home and citizenship to Virginia, surmounted obstacles, changed adverse opinions and convictions of the people, made the Peabody Education Fund a most popular trust, and became himself embedded in the confidence and affection of the South."

In nothing was the foresight and the profound insight of Dr. Sears into the then present educational needs of these States more evident than in the decisive manner in which he rose above all the former associations with his own religious body and the system of denominational education which was so dear to the sect and such a title to its honorable standing before the country. He saw at a glance that the old-time habit of private and denominational control of institutions of learning was so firmly rooted in the Southern mind and heart that the church there could be safely left to deal with the rehabilitation of every valuable school of this character that deserved a new lease of life. His judgment has been vindicated by the fact that in one generation from the educational wreck of the war the entire South is to-day in a far better condition in respect to this side of the secondary, higher, and professional education than ever before. The zealous efforts of all the religious bodies of the nation to plant important schools for the superior training of the negro youth of both sexes, including the important annex of industrial education, has already given to this race a better proportional outfit of excellent seminaries

than the united people of the whole country enjoyed until far along in the second half century of the national life. Dr. Sears recognized the fact that here was the providential reinforcement of the growing common school public of the South, which for fifty years had been laboring against almost insurmountable obstacles to give even free elementary schooling to the white children and youth of the humbler classes. Only this fact that in the South was found a large and increasing body of influential people who regarded universal education of the American type as the only means to remove the radical hindrances of every description to the prosperity of this section explains the immediate welcome to Dr. Sears, appearing as the representative of the common school idea, indorsed by such a weight of influence as the board of trustees of the Peabody Education Fund. Mr. Peabody had already expressed his own convictions that his great gift would be best employed for "the free education of the children of the South, without other distinction than their needs and their opportunities of usefulness." And although there were earnest and distinguished advocates of giving immediate appropriation of funds to aid the impoverished youth of the old families and rescue schools of long-established reputation from the peril of final collapse, yet the indorsement of the broader system by Dr. Sears, backed by a large majority of the trustees, not only prevailed, but finally won the dissenters over to a cheerful agreement with the final policy. The reason that the fund has to some extent been used to subsidize the denominational "colleges" and "universities" for the negro is that only in this way has it seemed possible to supply the imperative need of competent teachers of their own race for the new public schools.

The great success of the movement of Dr. Sears in persuading the people of many different classes and rival sects to heartily cooperate in the establishment of what was called "the graded school," simply the common school of the North and similar communities, including its secondary department, the high school, was certainly not due to the small amount of money he was authorized to distribute. The board at once decided in no case to meet the entire cost of maintaining any local school. The donation was rarely more than one-fourth the expense of its establishment and maintenance, and was given only on the pledge that the remaining three-fourths should be assumed by some responsible party or the municipal government of the place. Dr. Sears wrote in 1869: "Our maximum for white schools has been \$300 for 100 pupils; \$450 for 150; \$600 for 200, and we have paid in Virginia, North Carolina, and Georgia \$4,000 in each State for a little more than 2,000 pupils. I am inclined to adopt that rule, namely, \$300 for 100 white pupils and \$200 for 100 colored. It costs less to maintain schools for the colored children than for the white."

At a later date experience suggested a variation from this policy, and—

Instead of a proportionate distribution according to populations or poverty, a limited number of the larger towns, such as would exert the widest influence upon the surrounding country, was selected, and for any locality the maximum appropriation was \$2,000 and the minimum number of pupils was 100, being the smallest number that would admit of a graded school. These models of well-organized and well-conducted schools, showing the people what a good graded school is, did more to enlighten the communities, disarm opposition, and create a sound public educational sentiment than all the verbal arguments that could have been used. The chief benefit did not arise from what the fund gave, but from what it induced others to give and to do. The unvarying rule of helping those who help themselves, of requiring a larger sum than was furnished to be raised by local tax or contribution, has marked the entire administration of the fund and has had a most salutary influence in increasing fourfold what has been given for education, and in indoctrinating taxpayers with a sound economic principle that there is no more legitimate tax on property than that which is levied for the education of the masses. In many instances the towns soon assumed all the expense, the schools became self-supporting, and thus the timely and judicious aid gave permanence to schools, which continued to flourish after the fostering external help was withdrawn. Attention was thus excited, and soon the feebler rural districts were

reclaimed. The experiment of partial succor, conditioned on larger self-help, had a widening and happy influence in bringing about an organized, competent State system, which included both urban and rural schools.

Twenty-four cities and 200 villages, at first assisted by the fund, had soon been able to get on without it, and were supporting the graded system of public instruction free to all classes and both races. During the first twelve years of the administration of Dr. Sears, until 1880, this policy was followed with eminent success, and so wisely has the "business end" of this great charity been managed that during the thirty years contemplated for its existence by the founder a sum larger than the original gift has been disbursed, while by the grand donation of Mr. Peabody \$2,000,000 are still "in the bank," after carrying the repudiation of nearly \$2,000,000 of the bonds of Mississippi and Florida to the wrong side of the ledger. For several years these two States were left out in the distribution of educational aid, but finally, at the suggestion of ex-President R. B. Hayes, it was concluded no longer to punish the children for the policy of the fathers.

The thirty "years of grace" have come and gone. But the board has wisely concluded to indefinitely postpone the final distribution, and the consequent dissolution of the corporation. An almost unanimous protest against this policy came up from the entire educational public of the South. The very existence of such an organization, so wisely conducted, will in itself be one of the most powerful agencies in the coming revival of common school education, everywhere demanded and confidently predicted in the first generation of the new century. The effect of this gift in stimulating other and larger benefactions, not only for the common schools but for the higher education, contemplated by Mr. Peabody, has been realized. Between 1867 and 1898, not less than \$12,000,000 had been contributed in large sums to the cause of education in these States. Of this, \$8,000,000 have been given by their own citizens, and the willingness of States and communities to appropriate more generously and enact more favorable laws for the support of popular education has steadily increased.

But it was only by a slow and intermittent movement that the educational interest, prostrated by the ten years of war and civic agitation, lifted its head. In 1870, after three years of aid, largely including the educational centers already described, Dr. Sears reports, in his annual address to the board, that "the condition of affairs is unfavorable to systematic, vigorous, or liberal action on the part of the States." In North Carolina there was only the income of a State school fund of \$300,000 to educate 750,000 children. In South Carolina no schools were in operation under the new law, and, with the exception of Charleston, no towns supported schools by public taxation. No school law had been passed in Georgia, and only a few towns were moving. Florida had a good law, but little income. Alabama reported a school fund of \$525,000, 4,000 schools and 160,000 children, one-half the school population in attendance. On his first visit to Texas, in 1870, Dr. Sears found both laws and sentiment discouraging, and not till 1871 was a school system launched, only to go down amid a "fierce party strife." The good doctor went about his work with the broad impartiality of the Providence that maketh the "sun to rise on the evil and the good, and sendeth rain on the just and the unjust," but always grieved at heart over the discouraging sketch of "the impoverished condition of the people, State, municipal, and individual bankruptcy, the debts that hung with crushing weight on States, and the cruelty of increasing taxation for even the best purpose."

But even greater was the personal burden of going to every place as a peace-maker among the people themselves. "To deal with all sorts of people, from cranks and imbeciles to governors, legislators, and Congressmen; in short, to convince a community torn by political dissensions that seemed ever on the eve of bursting forth into civil war, and distracted by the habit of suspicion and recrimination that is the worst result of defeat in a supreme effort for a magnificent suc-

cess; not that he and the rest of the country were unworthy of confidence, but that the first necessity at home was to come to an agreement to do something for the common good that would lay a new and abiding foundation for the future." All these local causes of distrust were now reenforced by a movement in Congress to insert in a "civil rights bill" for the protection of the freedmen a clause requiring a system of "mixed schools," in which the children were to be educated together through all the Southern States. It was only by the determined and persistent efforts of Dr. Sears, General Eaton, and others of the best informed and most trusted leaders of the colored race, that this mischievous provision was left out of the bill, which would have been vetoed by President Grant had it passed through Congress.

But death and change are the lot of man, and the board of trustees of the Peabody education fund during the past thirty years has been no exception to the immutable decree of Providence. The original board of trustees, as arranged by Mr. Peabody and Mr. Winthrop, president of the board, has been already published in this essay. The Hon. William M. Evarts, disabled by age and infirmity, for a time the only remaining member of that illustrious company, Mr. Russell having resigned, died in 1901. The second table already referred to, containing the names of the entire number of gentlemen who at different times have succeeded to membership in the Peabody board, is itself an impressive commentary on the rapid disappearing of the generation that lived and wrought in the "grand and awful time" of the marvelous effort that decided the permanency of the Union.

Dr. Sears and Dr. Eben Stearns, first chancellor of the revived University of Nashville, whose academical department became the basis of what is now the Peabody Normal College, have also departed, and their places have been admirably filled. Dr. J. L. M. Curry, of Alabama, later of Richmond, Va., and at present of Washington, D. C., is now general agent of both the George Peabody and J. F. Slater educational funds. Dr. William H. Payne, of the University of Michigan, became chancellor of the University of Nashville and president of the Peabody Normal College on the death of Chancellor Stearns in 1887, and resigned in 1900. The place is now occupied by Hon. James D. Porter, of Tennessee.

A glance at this list of 46 men, 20 of whom by death or resignation no longer remain with the management of this fund, will explain the immediate respect and great expectations awakened through the entire South on its appearance upon the field of popular education in 1867-68, and the confidence reposed in it to-day as the trusted adviser and the fast friend of the section, and the best existing representative of the nation and the North thereto. It would be a fitting tribute to the great work already done that the proposition of Dr. Curry, that the Southern States should place a statue of George Peabody in the Capitol at Washington, be complied with. The time may come when the children of the South may be moved to emulate the spirit of the children of Massachusetts, who placed the statue of Horace Mann opposite that of Daniel Webster in front of the State House in Boston. And a final tribute of all educators and friends of the common school in the Union would be the gift of an additional million of dollars to the Peabody fund as a memorial to Robert C. Winthrop, to whom only less than to George Peabody this great benefaction owes its immediate and continued success, with a provision that this portion of the entire fund at least shall be made perpetual, and that the vacancies in the board of management, as fast as they may occur, shall be filled in equal measure from the group of eminent women educators of the country.

It was one of the earliest suggestions of Dr. Sears that the most imperative need of the new Southern schools was the supply of a sufficient number of competent teachers, at least for the work in what is known as the graded schools. It was a great advantage to the South that when all these States took up the final work of adopting the American common school as a permanent institution in 1870, it was no longer the old-time country or even the city isolated district school so fully

delineated in the gallery of educational sketches and full-life pictures so forcibly drawn by Horace Mann and Henry Barnard in the North, or the "old field" Southern arrangement so picturesquely drawn by Dr. Richard Malcolm Johnston in the South, or even the regulation private home or denominational school of the South before 1860. Dr. Sears and Dr. Stearns, who became the first president of the Peabody Normal School at Nashville, Tenn., were among the most reliable and experienced educators of their time, and no public man even of New England had a more intelligent and consecrated zeal for popular education than Robert C. Winthrop, who, as chairman of the committee on education in the Massachusetts legislature of 1837, was in at the beginning of the great revival that began in that State and the establishment of the first State normal school, located on July 4, on Lexington Green, Massachusetts, facing the monument there erected to the memory of the first martyrs of the Revolution. In the thirty years from 1837 to 1867, the date of the establishment of the Peabody fund, the old-time city, village, and even largely the country district school of New England, supervised by its own local trustees under such teachers as the wisdom or the whim of the "prudential committee" or the intelligence and zeal of the "town meeting" for the financial needs of education might place in the schoolroom, had been passing through an evolution into the complete system of the common school of to-day. That system, known in the South as the graded school, now offers the opportunity of a complete education, at public expense, to every child, from the little children's primary to the State university, including the later annexes of industrial training and the people's free library. No man, however wealthy, in Boston or New York in 1830 could have purchased such opportunities for the education of his children in his own State or country as are now freely offered to the child of every creed, nationality, or "previous condition" probably in every city of 20,000 people in every Northern State. And although the zealous advocates of the old-time European educational methods of the church and of the limitation of the public schools to the elementary and industrial departments still make their chronic protests, the people of the United States have determined, with a unanimity not found in any previous action, that this shall be the accepted method of training young America for the most honorable and, in the coming century, most responsible and difficult human position, intelligent, moral, and effective American citizenship, and that whatever else "goes by the board," the people's common school in its present and improved organization shall abide.

Such expectations as were now awakened in the executive work of the nation's great common-school board, the trustees of the Peabody education fund, could not fail to appeal both to the pride and the feeling of stern necessity of the leading educators and influential people to place the new system on a solid foundation, and accept nothing but the best for the schooling of their children and youth. There was found at once the most valuable material in any country for a temporary supply of teachers in the great number of women of good culture, high character, and social standing, who, by the fate of war and losses of property, had been left to the prospect of earning their own bread. At the call of the people many of these excellent women at once appeared, not only working to gain an honorable support by labor in an untried field, but moved by a great desire to contribute to the rehabilitation of their States and communities in this, the most vital way. During these first twelve years—including the entire term of the service of Dr. Sears as agent of the Peabody fund—not only the reviving seminaries for girls, but in large degree the new public schools, were taught by women of the foremost character, culture, and social standing, whose place in the schoolroom shut the mouths of cavilers, and assured the better sort of people that here was the place of all others where it was safe to educate their children. During the first five years of the Southern ministry of education of the author of this essay, he met hundreds of these persons, many of them the widows and daughters of the most distinguished military and civic characters in the Confederate cause, who

gave to their daily task in the schoolroom the same burning zeal, tact, and self-sacrificing affection that had been so sadly disappointed in the attempt to establish a new nationality. And it should be said to the praise of these good women, and only less completely to the large number of distinguished men who came to the front during the first twenty years in the new educational movement of Southern schools, that they went to their work in no spirit that separated them from the most confidential personal relations with the superior teaching officials of the whole country. It may be truly said that there was one set of people in the United States who, in 1865, were in no special need of "reconstruction," the superior educators of the whole country, who at once found each other out and met each other as friends and fellow-soldiers on the nobler battlefields where the grand army of the nation's youth was marshaled responsive to the old-time prophecy, "A little child shall lead them."

But even for this class there was a great need, by nobody more keenly realized than by themselves, for the special training that would equip them for the best service in the new graded common schools. It was not possible or wise to bring expert teachers from the North or from abroad in any considerable numbers, although many of these were found working in beautiful accord with their Southern brethren and sisters in their noble calling. But there was at once a swarming of such as could afford the pecuniary expense to the great summer schools of the nation, and the new collegiate and normal schools for women were never so largely attended from the South, even in its days of prosperity before the war. There was the most imperative necessity that in some way at once there should be placed on the ground an arrangement by which, at the smallest expense in time and money, at least a portion of the leading teachers in every locality should be trained in the best methods of organizing and disciplining the new graded schools, that they might become the models for their subordinates and prevent the new system from being a disappointment to the people who, often at great personal sacrifice, were supporting it. Of course, at once there sprang up the usual crop of feeble imitators and educational shams of the old-time "infant-school" type, in charge of a teacher whose chief outfit was pecuniary impecuniosity and an all-sufficient self-confidence. But there were numbers of others, honest and progressive young people, who were no longer satisfied with the regulation schooling of the days of the fathers and grandfathers, but demanded the same professional training that their class was then receiving in every civilized land.

It was perhaps not remarkable that this want was first supplied to the colored pupils by the establishment and generous support of a great number of schools of the elementary, secondary, and higher type through the agency of all the religious denominations in the Northern States. This was the result, to a large extent, left by the great effort of the nation and the North, as already described, during the war and up to 1872, through the Freedmen's Bureau. The result was not only the primary schooling of many thousands of youth and adults, but the placing in the constitutions of all the reconstructed States a provision for the common schooling of all children. In several of the larger Southern cities the public schools for the colored children were instructed by white teachers. Indeed, as late as 1882, the writer of this essay visited in the city of Charleston, S. C., the seat of the opening of the civil war, a great public school of 1,500 pupils, superintended by a Southern brigadier-general and instructed by a devoted corps of women teachers from good Charleston families, justly the "show school" of the city. The same was true at that time of Richmond, New Orleans, Baltimore, and other cities.

But this, of course, could be only a temporary supply. At once, beginning at the Hampton Normal and Industrial Institute, at Hampton, Va., and following in a score of the larger schools established by Northern charity in spacious buildings, were placed excellent teachers drawn from Northern schools and colleges, often of great experience, large culture, and denominational importance, furnished

with libraries and opportunities superior to those enjoyed in many of the colleges for the whites.

For a time there was really a greater absence of supply of professional teachers among the white than among the colored youth. In his first communications to the Peabody board, Dr. Sears had enforced the immediate necessity of this matter. Dr. Curry says: "In the whole South there was not a single normal school." Many annexes and departments with the name were hastily originated, but these were in denominational and private institutions, and rivalries and jealousies soon compelled a resort to the principle of confining aid on the plan of the Peabody trustees to such schools as were under State control. The attempt to utilize the existing schools for this purpose in Virginia and Louisiana, as in several States in preceding years, soon came to naught, and before the end of the first year of Dr. Sears's administration it was seen that schools must be created by the board to meet the immediate emergency.

In 1876 it was determined by the board, by advice of Dr. Sears, to omit the gifts for general education and concentrate on the pressing need of the schools for the training of teachers who should become leaders in the campaign of the establishment of the new graded and county district schools for the whole people. The policy of establishing the new special institutes was recommended, but this encountered the double difficulty from the extreme summer heats of the Gulf States and the expense of attending by teachers so poorly paid.

But already, in 1875, an opening appeared by which a solid foundation could be laid for this great work through the establishment of a model normal school that should at once send forth a limited number of trained teachers and enable every State and city to obtain one or more of the graduates. In a previous Report of the United States Commissioner of Education a deeply interesting account will be found of the labors of Dr. Lindsley, in Nashville, Tenn., from 1824 to 1850, in behalf of a great university in the Southwest. The good doctor, like the prophets and kings of old, had "desired it long, but died without the sight" of his ideal institution. But his memory was cherished, and his many able and numerous publications set up in Nashville a light-house flashing radiance over the troubled educational waters of the State and the Southwest, and he had left the foundations for a superstructure in the Valley of the Mississippi. In 1876 Dr. Sears found at Nashville, Tenn., a "campus" of 16 acres, containing a number of substantial school buildings and a small library and museum, a medical and law school annex, and a limited amount of funds, all in the hands of a board of trustees, composed of the foremost men of the city, including Governor Porter and the son of the old president, who had laid down his life for the cause so near his heart. An address to the legislature of Tennessee by Dr. Sears secured no encouraging response; but the trustees of the University of Nashville, by which name all this was called, offered \$6,000 and the use of all the buildings of the corporation and the establishment of a normal school in place of the academical department of the institution. Dr. Eben S. Stearns, one of the most distinguished school men of New England, who, under the secretaryship of Dr. Sears, in Massachusetts, was appointed to the principalship of the first normal school in the country, then located at West Newton, Mass., where a group of young women had been educated who went forth to acquire a national reputation, afterwards principal of the Albany (N. Y.) Female Academy, whose teachers were chiefly drawn from his own normal school in Massachusetts, and later the principal of a superior school for girls in Exeter, N. H., was called to the chancellorship of the university, including the principalship of the new Peabody Normal Seminary.

Dr. Stearns entered upon this, the greatest of his life-works, on December 1, 1875, with a class of fifteen female pupils amid a great deal of private disparagement, indifference, and hostility, while the State of Tennessee withheld the aid necessary for its rapid development. But Dr. Stearns was not the man to fail. He demanded

the use of the representatives' hall in the State capitol for his inauguration exercises, and planted a memorial tree at the close of his first year's labor. In 1876 the Peabody Education Board came to the rescue by the appropriation of \$300 a year for giving student aid in the form of two years' free tuition to each of a number of students from the ex-Confederate States, the candidates to be appointed after a competent examination and limited to the number of the State delegation in Congress. This student aid was later reduced from \$200 to \$100 a year. By this arrangement 204 students were soon gathered, and the Peabody Normal School at Nashville at once took rank among the better class of seminaries of its kind in the Union. The students were pledged to teach for a limited time after graduation, and these States have received great assistance in the organization of their common-school systems from some of them. At a later period the material facilities were improved by the building of a president's house, a gymnasium and library, and a modern schoolhouse. In the twenty-two years from its establishment to 1898 \$138,584.10 had been given by the Peabody fund in this way to twelve States.

In 1879 the continued lack of interest in the college by the people and legislature of Tennessee precipitated a crisis in its affairs. The trustees authorized Dr. Sears to enter into negotiations with the State of Georgia for its removal. Only the provision of the constitution of that State, which placed every institution of learning in the Commonwealth receiving State aid, under the general title of the "University of Georgia," with the probability of a divided administration, prevented the acceptance of a very flattering offer for its establishment in that State. The citizens of Nashville came to the rescue and relieved the school of several items of expense, until the legislature could be brought to more favorable terms, beside a generous appropriation for the repair of the buildings. Encouraged by this liberality, the able and devoted Chancellor Stearns wrought with redoubled energy. In June, 1881-82, the State agreed to contribute \$10,000 annually, and the sum was afterwards raised to \$15,000, on condition of a perpetual number of scholarships for students from the State.

It is not improbable that the labors and anxieties attending the final disposal of this matter shortened the life of Dr. Sears. He died at Saratoga, N. Y., before the completion of the final organization on July 6, 1880. Not even among its own most illustrious educators has the South ever known a better friend than this great and good man; great and good in breadth of mind, ability in administration, and indomitable patience; above all, with the "charity that never faileth," so rarely united in the benefactors of States and nations. His service of twelve years in an office that would have taxed the energies of the most competent and original educational statesman and administrator can never be fully estimated. It has already become a part of the lifeblood of many Southern communities and, like all work of this nature, will be most valuable as the seed corn of a future harvest more abundant as the years go on.

Seven years later the Peabody Normal School was visited with an even more distressing affliction in the death of Chancellor Stearns, which occurred at Nashville on April 11, 1887. Dr. Curry fittingly says of him: "For eleven years and more Dr. Stearns gave untiringly his energies and ability to this enterprise, and what it became was largely due to his zeal, his paternal watchfulness, his brave helpfulness, and his administrative and scholarly capacity."

The place of Chancellor Stearns was filled by the appointment of Dr. William H. Payne, on October 5, 1887. Dr. Payne was called from the University of Michigan, where for several years he occupied the chair of pedagogics, afterwards filled so ably by Dr. Hinsdale. Under his administration the Peabody Normal College, as it is now named, made rapid strides in numbers and equipment until it ranks with the best of the superior training schools for teachers in the country. In 1897 it reported 544 students and 25 instructors, with the advantage of situation and

the general aid and appurtenances of a college of established reputation as a basis for the training of teachers capable of assuming the leadership of all superior grades of schools in the South. Chancellor Payne resigned in 1901.

The period of the administration of Dr. Sears, ending in 1880, may be regarded as the formative and most critical in the establishment of the complete common-school system in the South. For already, as early as 1863, in West Virginia and during the war, in 1864, by the partial establishment of a loyal State government in Louisiana, and in all the Southern States by the insertion of a provision for a system for the public instruction of all their people in the new revised State constitutions, the basis had been laid for the future building for the children. Yet the progress was very slow and the best-informed friends of education were not among the most hopeful concerning the final success of the great experiment. The cold figures of educational statistical tables are of little value in a correct estimate of the labor, sacrifice, and "wear and tear" of soul and body and public and private endurance involved in such an undertaking. It is easy to see that up to 1880 the new graded schools, even in the larger cities and villages and county towns of all these States, were beating uphill, laboring against a variety of hindrances and overshadowed by the mighty industrial, social, and political changes that within the thirty years had given the nation not only a new South, but also a new East, and especially a greater new West that now aspires to "set the pitch" of the later American civilization.

And in the vast open country, where nine-tenths of the Southern children live, the progress of the new education was painfully slow. One of the earliest results of the war was the drifting of a great body of the most progressive and able young men of the ex-Confederate States away from the old rural life upon the plantations and the farms not only to the more prosperous towns but largely to other States. It has been said that 1,000,000 young men have in this way left the Southwest for the Northwest and the States beyond, beside another great crowd who have gone from the Atlantic coast States to the leading cities of the Northeast. The young women left behind have often shown a remarkable energy, lofty spirit, and honorable ambition to do the best under the most discouraging circumstances for the intellectual, moral, and religious uplift of the old home. When the critical educator is tempted to regard with indifference or contempt the imperfect results of the new educational life in such localities, he may be reminded to call up the story of patient labor, weary waiting, and poorly paid toil that is a daily sacrifice "hallowed by prayer without ceasing," the most heroic courage and the tenderest sympathy in behalf of the little ones, of the faithful, often overworked mothers, devoted young wives and sisters, splendid daughters, and "glorious maiden aunts" in the churches and the schools. There are hundreds of faithful men and women toiling in these little schoolhouses, quietly laying the foundations of the better time coming. And in all these humble temples of the new civilization the names of George Peabody, Robert C. Winthrop, Barnas Sears, Eben S. Stearns, J. L. M. Curry, and William H. Payne will be held in deeper reverence as the years go on.

The position of general agent of the Peabody fund and honorary member of the board of trustees, vacated by the death of Dr. Sears in 1880, was filled in the following year by the appointment of Dr. J. L. M. Curry. Dr. Curry was a native of Georgia, although he was brought to the beautiful mountain region of Alabama, at Talladega, in early youth. A graduate of the University of Georgia, he completed his professional education at the law school of Harvard University. As a young member of the Alabama legislature, he was placed on the committee of education, and was influential in the early movement for a system of common schools in that State before the civil war, in 1854. In 1857 he was elected a Representative in the Congress of the United States from his own district, and at once attracted attention by a peculiar blending of classic elegance and impassioned eloquence in the debates of that body. He followed his adopted State into the

Confederacy, and after a brief term of military service was elected to the Confederate congress, of which he remained a member until the close of the war. Removing then to Richmond, Va., he became a professor in Richmond College, an institution of the Baptist denomination. His attention was soon earnestly directed to the final movement for the establishment of a complete system of public instruction in Virginia. His early acquaintance with Dr. Sears soon ripened into a devoted personal friendship, emphasized by the increasing interest his new friend had so much at heart. It is understood that Dr. Sears had his friend in mind as the one man in the country best qualified to succeed himself on his retirement or death. For obvious reasons in 1880 it was desirable that the second agent of the Peabody fund should be a native of and resident in the South. Dr. Curry was unanimously elected to the post of general agent and afterwards to an honorary membership of the board of Peabody trustees, in 1881, the detailed business of the office during the interim being transacted, under the supervision of President Winthrop and the Hon. A. H. H. Stuart, of Virginia, by Mrs. Fulz, the daughter of Dr. Sears.

The opening administration of Dr. Curry, as agent of the board of trustees, was signalized by a new departure in the policy of distributing the funds of the association. The progress of the common-school movement in all the Southern States brought to the board more forcibly than ever the necessity of better provision for meeting increased demand for competent teachers. It was now fifteen years since the close of the war, and many of the devoted men and women who had bravely come forth as volunteers in the teaching force in the schoolroom had passed away or were forced into retirement by age and declining health. Already a new army of graduates from the graded schools and reviving seminaries and colleges were seeking the especial preparation essential to success in the still novel profession of graded-school instructor. The Peabody Normal School at Nashville was not yet in a position to accommodate more than 250 students. The great necessity seemed to be the establishment of normal schools in every State, following the habit of all the Northern Commonwealths. Besides this, it was held that the superintendents of the city and village schools should be required to form a teachers' department from their higher class, which might often assume the work of a fitting school for college, with an opportunity for observation and practice in the management of schools in all the grades below. The teachers' institute and conventions, State and local, were to be utilized for the same purpose as in the North, especially for the benefit of the teachers in the rural schools who had been unable to profit by the other agencies. An increasing number of the more ambitious teachers, often at great sacrifice of energy and with very moderate means, were spending their vacations at the great summer schools of instruction in the East and West or in a tour abroad, and the country already was feeling its way toward the annual Chautauqua Assembly, its founder, the present Bishop Vincent, of the Methodist Episcopal Church, being a native of Alabama.

In this state of affairs it was decided that the income of the Peabody fund, now somewhat diminished by the declining rates of interest, should be largely concentrated upon the work of increasing and improving the entire teaching force in all the Southern States. The allowance of \$300 per annum for two years to the students of the Peabody Normal College was reduced to \$100. Dr. Curry went South to address the different legislatures in behalf of the immediate establishment of State normal schools, with a promise of aid from the Peabody fund for several years. Dr. Sears had already advocated this work in his conferences with Dr. Henry Ruffner and Dr. Curry in the beginning of the period of public instruction in Virginia, 1870. Dr. Curry at once came to the front as the man of men to deal with the legislatures of these States. His long political experience, glowing eloquence, educational wisdom, and admirable blending of "fiery zeal" and conservative policy lifted him at once to a position above governors and legislators and

made him the "guide, philosopher, and friend" both of educators and statesmen. It will not be known until the death of this foremost of Southern educational reformers how great has been his influence during the years since the acceptance of his present office. To this work has been added the agency of the Slater fund, of \$1,000,000, for the education of the colored race, established by Mr. John F. Slater, of Norwich, Conn. It is said that Dr. Curry has addressed a larger number of legislative bodies as a private citizen than any man now living in the Union. These addresses would form one of the most valuable additions to the educational literature of the country. His personal address and progressive and masterful handling of all matters connected with education, with his intimate knowledge of the conditions of public opinion in all the Southern States and their prominent localities, have borne abundant fruit and were never so valuable as now. Each of the Southern States, in response to the powerful appeals of Dr. Curry and other friends of education, established State normal schools of the American type. In several States more than one of these schools are now supported, sometimes by the policy of subsidizing academical seminaries for this purpose, although it seems that the normal element is more evident in these schools than in some of the Northern seminaries of this description. The summer school of instruction, the Chautauqua assembly, the teachers' associations, local, city, and State, have all risen to importance since 1880, and the teachers of the Southern schools, besides a general association of their own, find a valuable element of improvement in the annual meetings of the National Educational Association.

The labors of Dr. Curry, as agent of the Peabody fund, were interrupted in 1885 by his retirement from the office, caused by his appointment as minister of the Government of the United States to the court of Spain by President Grover Cleveland. During his three years' absence from the country the affairs of the fund were well directed by Dr. Samuel Green, of Boston, Mass., as secretary of the board of trustees, in constant cooperation with Mr. Winthrop, both residents of that city. Dr. Green is well known as one of the men of good work and good will in a city so rich in men and women of that munificent type. The administration of the Peabody fund suffered no decline under the vigilant supervision of two such devoted friends as himself and the venerable president. Dr. Green visited the Southern schools aided by the fund, and commended himself to all with whom he was brought in contact. On the return of Dr. Curry, induced by the increasing danger to the health of himself and family in Madrid, he was summoned again to what, since 1888, has been his complete work. In the agency of the John F. Slater fund, made vacant by the appointment as bishop of the Methodist Episcopal Church South of that early apostle of the education of the colored race and among the foremost leaders in the work of collegiate and popular education, Dr. Atticus G. Haygood, this position was offered to Dr. Curry, and for the past thirteen years both these great benefactions have been administered in the only way by which such a trust can be effectively used by a man of such commanding ability and executive capacity for the work behind it that every dollar expended goes to its place, charged with a vitality that reenforces the mental, civic, and religious life of a community.

In 1895 the last of all its great afflictions came to the board of Peabody trustees in the death of its great president, Hon. Robert C. Winthrop. He died in Boston, Mass., November 14, 1895, in his eighty-fifth year. His monument bears the inscription—of which his son and biographer well says, "I doubt if he could be better described in fifteen words"—"Eminent as a scholar, an orator, a statesman, and a philanthropist—above all, a Christian."

The recent biography of Mr. Winthrop, edited by his son who bears his honored name, with the testimonials of the Massachusetts Historical Society, the national Bureau of Education, the Teachers' Association of the State of Texas, the dedication of the State Normal College for white girls in South Carolina to his

memory by the adoption of his name and the establishment of an annual memorial service, the press everywhere, and the affectionate tribute of Dr. Curry, his associate and devoted friend, relieve this essay from the necessity of enlarging on the life and services of this foremost citizen of his native metropolis, the most widely known of American public men abroad, and, beyond all American statesmen, celebrated by the consecration of the last twenty-seven years of his life to the great work of educational reform, as president of the board of trustees of the Peabody education fund for the Southern States.

Robert Charles Winthrop was born in Boston in 1809, a direct descendant, in the fifth generation, from the first governor of the Massachusetts Bay Colony, John Winthrop, whose biography he wrote. Graduated from Harvard University at the age of 19, he studied law in the office of Daniel Webster, and was admitted to the bar at the age of 22. In 1834, at 25, he was in the legislature of Massachusetts, where he remained for six years, serving as speaker of the house of representatives until 1840. At the age of 31 he was sent to Washington as a representative of Boston to the House of Representatives in the National Congress, serving five terms, ten years, until 1850. While in the Massachusetts legislature, as chairman of the joint committee on education, in 1837, he reported the series of enactments which resulted in the establishment of the Massachusetts board of education and the appointment of Horace Mann as its secretary. Later Mr. Winthrop also assisted in the same way in the founding of the first State normal school in the United States at Lexington, Mass. His addresses on education were notable, even among his associates in public life, of whom Horace Mann said there was no man of great public eminence in New England during that generation who had not served as a teacher or effectual friend of the public schools. Entering Congress in 1840, he at once became the foremost representative of the Whig party in that body, and in 1847 was elected to the Speakership of the House of Representatives. In 1849 he failed of reelection to the same office by three votes. On July 30, 1850, he was appointed to membership of the Senate of the United States, to fill the unexpired term of Daniel Webster, who had recently become Secretary of State under the Administration of Millard Fillmore.

On the 24th of April, 1851, Mr. Winthrop permanently retired from political life by failure of election as Senator of the United States. The crisis in the growing contention between the free and slave States of the Union had now reached an imminent stage, prophetic of the final attempt at separation in 1860-61. His political opponent, the representative of the two political organizations which, in 1856, appeared as the Republican party of the nation, Mr. Charles Sumner, elected to the United States Senate from Massachusetts by a coalition vote, then entered public life, in which he continued until his death. Mr. Winthrop's defeat as candidate for governor of Massachusetts, to which office he would have been elected had the present method of choice by a plurality instead of a majority vote above all opposing candidates been in operation, caused his final retirement as a candidate for any public position from public life at the age of 42, although he occasionally appeared on the political platform, and was doubtless offered more than once opportunities for official preferment. While his patriotism and devotion to the Union and freedom were always understood, he was by temperament, training, and public experience a liberal conservative, and, like all men of that type, was in retirement during the turbulent years from 1850 to 1870.

But this defeat in what promised to be one of the most successful careers of political statesmanship in a generation was a providential event for the cause that lies below all public affairs, the education and training of the children and youth for sovereign American citizenship. At once, as if relieved of a temporary burden in the form of high political station, Mr. Winthrop rose to the full stature of perhaps the loftiest distinction known to our American order of society, the supreme statesmanship of a great man in private station. Above the names of all, save a

few leaders of political history, will shine forth the names of George Peabody and Robert C. Winthrop through all time in the sixteen great Southern Commonwealths of this Republic.

During the sixteen years immediately following his retirement from public life Mr. Winthrop was one of the most active men in America, at home, engaged in almost every important question of social and educational importance and the cultivation of the highest public spirit and character. His numerous addresses, now published in several stout volumes, are not only models of the noblest eloquence, but also a diary of the nation's progress in education, prosperity, and practical religion. It is highly probable that during George Peabody's life he was the adviser and chief American repository of his plans for the expenditure of nearly \$10,000,000, especially for the noblest benefaction of all, the \$3,000,000 located in the Peabody education fund. From the memorable day in 1866, when he was visited by George Peabody at his home, in Brookline, Mass., and listened to the plan of this "great citizen of the world and brother of mankind" concerning the use of this fund for the children and youth of the South, and the first meeting, February 8, 1867, when, as president of the board of trustees, he presided in an "upper chamber" at Willard's Hotel, Washington, D. C., and during the entire twenty-seven years, until his death, November 14, 1897, Mr. Winthrop lived for the one care, the presidency, whose administration he declared "the greatest honor of his life." That life fully justifies the final words of his epitaph, "Above all, a Christian."

It will probably never be known to what an extent he directed the mind of George Peabody in the choice of the board of trustees or the general policy of their administration. It is, however, well understood that both the two agents and the two presidents of the Peabody Normal College were in constant communication with Mr. Winthrop, and in no known instance in any vital movement differed from his opinion. In the several important departures of the board, like the original dedication of the fund to the upbuilding of the common school for both races and all classes, in the choice of central strategic educational points as the bases of operation in all the States, in striking first the cities and larger villages, in the subsequent determination to confine the distribution largely to the training of teachers, including the founding of the Peabody Normal College at Nashville, and the subsidizing of State normal schools for both races, and aiding the States in the support of teachers' institutes, in the hearty support of the movement in Congress for national aid to education; in all these and in other only less important matters Mr. Winthrop's judgment, experience in public affairs, large acquaintance with distinguished men at home and abroad, and especially his devotion to the work which he regarded his highest opportunity to serve his country, the work on which his exalted reputation will finally rest, his vigilant and judicial spirit was always evident. His complete biography, not yet written, will reveal to the public men of the country an ideal of patriotic service so exalted that the gift of George Peabody would have been fully justified had it only left to the people the memory of such a common-school board as the trustees of the fund and the twenty-seven years consecration to the duties of its presidency by a man who, in any other than a revolutionary period, would only have stopped short of the Presidency in a political career of the highest order and most illustrious fashion.

As companion pieces in American educational history to the Peabody education fund, we may here fitly make mention of two subsequent donations, especially for the schooling of the colored race, the John F. Slater donation of \$1,000,000 in 1833, and the later gift of \$1,000,000 by Daniel Hand to the American Missionary Association for a similar purpose. In 1833 Mr. John F. Slater, of Norwich, Conn., a private citizen largely engaged in manufactures, "in view of the apprehensions felt by all thoughtful persons" for the education of the colored citizens, placed in

the hands of a board of trustees \$1,000,000 "for the uplifting of the lately emancipated population of the Southern States and their posterity, by conferring on them the blessings of a Christian civilization." He sought to provide "not only for their own sakes, but also for the sake of our common country, means of such education as shall tend to make them good men and good citizens, by training in just notions of duty toward God and man in the light of the Holy Scriptures." He advised "on lines of operation adapted to the condition of things, the employment of such methods as are most effectively useful in promoting the training of teachers." The trust was to be administered in no partisan, sectional, or sectarian fashion, but in the interest of a generous patriotism and enlightened Christian spirit. By "Christian education," Mr. Slater takes especial care to explain, "truly leavened with a predominant salutary Christian influence, such as is found in the common-school teaching of Massachusetts or Connecticut, with no need of limiting the gifts of the fund to denominational institutions." Neither principal nor interest of the fund was to be expended for land or buildings. Ex-President Rutherford B. Hayes, of Ohio, was appointed president of a board of trustees, chosen on the same principle as the Peabody board. Indeed it is highly probable that this and other large gifts for education in the South were suggested and often determined by the great success in the administration of the benefaction of Mr. Peabody.

With great wisdom Dr. Atticus G. Haygood, of Georgia, was appointed as the first agent of the Slater fund. Dr. Haygood was a native and resident of the State of Georgia. He came of a family well known for its interest in education and religion in the Methodist Church South. His brother served as a trustee of the public schools of Atlanta, Ga. His sister, Miss Laura Haygood, for several years was beyond question the most distinguished woman connected with the public-school system of the South, as principal of the Girls' High School of Atlanta, founded by Superintendent Mallon. Miss Haygood for more than the ten years before her death was engaged in an important missionary work connected with the higher education of Chinese girls.

Dr. Haygood, at the time of his appointment, was president of Emory College, Georgia, the principal institution of the higher education for young men in the Methodist denomination in that State. He had already distinguished himself as a young man of great vigor of mind, breadth of view, and administrative capacity in his college presidency. His attention was early directed to the study of the educational status of the colored people, and in his admirable book, *Our Brother in Black*, he outlined the most effective method of dealing with the educational as well as the social and political situation. He took the field as a lecturer in defense of the educational training of the negro, and at great hazard of opposition in high social, civil, and ecclesiastical quarters, persisted, becoming widely known in all the educational centers of the North. He resigned the presidency of the large denominational college to accept the agency of the John F. Slater fund in 1884. His reports as agent are among the most valuable contributions to the literature of this very difficult subject, combining a broad, Christian catholicity and enthusiastic patriotism and an all-abounding charity in his discussion of a question beset with temptations to every form of ignorance, prejudice, and sectional contention. His advocacy proved such an eminent success that it finally brought around the entire common-school public of the South to his ideas and secured his election to a bishopric in the Methodist Church South at an earlier age than any of his predecessors. His labors and trials in these efforts seemed to have exhausted even his matchless physical vitality and he died a short time after his appointment at the end of a short term of service in California. One of his future plans was the establishment of a great college for white girls in the South, on the plan of Wellesley, Smith, and Vassar, and others well known in the North, so complete that it might meet the demands of the most ambitious student, and so

well endowed for student aid that no worthy girl should be turned away. This, with its broad plan and great expectations, was dissipated by his early death. But his name in his State has connected the years of his life with works of permanent value; and one of its most valuable lessons is a proof that the leading class of the Southern people has an open mind to genuine criticism and is not behind the corresponding class anywhere in its full appreciation of an educational career in which the most advanced ideas are blended with a single-minded consecration, a dauntless courage, and a faith in that "sober second thought" of the people which in great national emergencies is perhaps the best earthly representative of the voice of God.

On the resignation of Dr. Haygood and upon the return of Dr. Curry from his ministry to Spain and his resumption of the office of agent of the Peabody fund, the corresponding presidency of the J. F. Slater fund was offered to and accepted by him. This fund seems destined to combine the work of industrial training with the education of the mind and character as the central purpose of the common school. For the last few years the Slater fund has thus been administered, giving by annual appropriations an opportunity for the establishment both of a department of industrial training and the better education of teachers for the public schools. In this way many of the large colleges and universities, supported by the different religious bodies of the North, which formerly had not seen their way to take up the expensive department of manual training and household work for girls, have been enabled by the aid of a stated annual contribution from this fund to embark on this much-needed new departure in the secondary and higher education of colored students of both sexes. From 1884, the first distribution, to 1894, \$439,981.78—a sum nearly half the original donation of Mr. Slater—had been applied under the wise direction of Dr. Haygood and Dr. Curry; in 1891 the sum being \$50,650. The combination of this system of subsidizing two classes of schools under the oversight of a common superintendent, and such a superintendent as Dr. Curry, now by common consent the foremost educational statesman of the South, provides a more effective administration with a considerable saving of money.

The Slater fund has made an important contribution to the literature of the new education by a series of able papers, published in addition to its annual reports. The general scope of these publications, as of all the reports and the publications of this charity, is well stated in the words of Dr. Curry: "The trustees of the Slater fund believe that the experimental period in the education of the blacks is drawing to a close. Certain principles that were disputed thirty years ago appear to be generally recognized as sound. In the next thirty years better systems will undeniably prevail and the aid of separate States is likely to be more and more freely bestowed. There will also be abundant reasons for continued generosity on the part of individuals and communities. It is to encourage and assist the workers and the thinkers that these papers will be published."

THE MISSION SCHOOLS FOR THE COLORED RACE ESTABLISHED BY THE CHURCHES AND PEOPLE OF THE NORTHERN STATES.

The value of the great work in behalf of the education of the freedmen during the civil war under the protection of the American armies and the Freedmen's Bureau, continued by the Peabody and Slater education funds, and through the past thirty years by private individuals, churches, and benevolent associations, can by no means be rightly judged if confined to its primary and direct results on the 10,000,000 or more of these people. Its indirect results, never so eminent as to-day, were in many ways more important. Two of these were, first, the waking of the entire mass of the 5,000,000 colored people in the South on their emancipation to the necessity of independent labor and preparation for their new American citizenship; and, second, the inserting of a provision for popular education in the

revised constitution of every reconstructed State by the years 1870-1873, only eight years after the collapse of the war. It now remains to follow out the enlargement of this stream of tendency during the thirty-five years since the advent of peace by a brief account of a large number of institutions of learning of a type never hitherto established for the uplift of a class in any respect similar to the emancipated slaves of the United States in 1865-1900. There is no more valuable development of the American innate genius and ready tact at seizing a grand opportunity and adjusting old agencies and methods to novel occasions than the very interesting type of seminaries which, under various and sometimes exaggerated and inappropriate names, have been built up during the past thirty-five years in our 16 Southern States for the mental, moral, and industrial training of the children of the colored people.

The Report of the United States Commissioner of Education for 1896 contains the names of 178 of these institutions, which include all grades of schooling, with 40,127 students, of whom 25,092 are in the elementary, 13,563 in the secondary, and 1,455 in the collegiate, 4,672 in the manual training, 1,319 in the professional, and 12,341 in the industrial departments and grades. These schools are taught by 1,636 teachers, and contain 209,801 volumes in libraries, valued at \$166,574. Their school properties amount to \$7,524,948, and their annual income is \$1,117,569, of which \$289,845 is from State and municipal aid, \$124,481 from tuition fees, \$92,297 from permanent funds, and \$610,946 from "unclassified sources." A large majority of these schools are of the character above described, graded seminaries with departments for the secondary, higher, industrial, and sometimes normal and professional training. Three-fourths the income is probably received from contributions of Northern people; special benefactions and bequests amounting to \$323,718. These, with the exception of a limited number of public high and State normal and industrial schools, are supported from the North, under the direction of the missionary associations of the different Christian churches, or occasionally dependent on private contributions. A few of the higher are subsidized by the Southern State governments. Their teachers are largely white, drawn from all portions of the Union, and sometimes from Canada, and the body contains a fair proportion of instructors who would be regarded anywhere as experts. Besides these, there is even a greater number of smaller local schools, largely built up and supported by the zeal and contributions of private individuals, single churches, and associations from the North. The reports of this class of educational institutions are often difficult of attainment and not always correct, as was the case with all schools in the South before the civil war. A large expenditure of money and labor besides that now reported in the annual statements of educational statistics by the national Bureau of Education is always going on, of which no permanent public record is made.

The most effective feature of these schools thus far has been the training of a large number of colored youth of both sexes for the work of teaching in the common schools of the colored race. There were, in 1896, 1,429,713 colored children and youth in attendance on the common schools of the South, and, outside of a few cities, their teachers are of their own race. When we remember that in 1835 the illiteracy of the colored population of the South was almost universal, the fact that native teachers of any grade in sufficient number to preside over this multitude can be provided is surely encouraging. And although the schools in which these teachers were educated, or, at least, three-fourths of the whole number, are not public and in no way dependent on State or municipal aid for their support, yet their intimate relation to the common schools in the training of these teachers, and to the general community in their professional and industrial departments, justifies such brief notice as the limits of this essay permit of their organization, support, success, and possible future in all these States.

The first movement in the direction of the peculiar training of the children and

youth of the freedmen, including many adults, in the elementary schools for letters, discipline, and, finally, industrial and domestic life, was such as could be improvised by the imperious conditions of the situation. The work was done during the war in the wake of advancing armies, under the military protection and the outward supervision necessary to success. Before the close of the war the organization of the school life of these people was left to associations or individuals. Under the Freedmen's Bureau a general superintendent of these schools was appointed for each State, with subordinate agents for the different localities. This supervision was often of the most informal sort, principally for the purpose of protection where military aid could be afforded. But after the Freedmen's Bureau was abolished the schools that stood on no firm foundations generally closed by default, leaving such as remained in charge of special associations and individuals to whom they could look for support.

In process of time two types of school appeared, more and more decisively distinct as the years have gone by. The majority have been taken under church and sectarian protection, organized and conducted virtually in imitation of the denominational academy and college of both sections of the period at which the war broke out. Many have been named academies and institutes, and several dozen, perhaps more, colleges and universities. The teachers of this latter class have taken the name of professors and presidents, their courses of college study have been copied almost verbatim from the corresponding class of seminaries of the higher education in the Northern and Southern States, and in some cases college degrees have been conferred. And although by the necessities of the case an overwhelming majority of their pupils could only be instructed in elementary studies of a low grade, yet these institutions, generally designated as the graded schools, colleges, and universities of half a century ago, have been gradually found insufficient for the present need and actual conditions of these people. A large portion of the reliable work done in them has been of a pronounced religious, moral, and social character. In all the larger institutions the pupils and their white teachers have been housed together, living, indeed, in a relation in which the school, church, and family have been blended in the way the manners, customs, and habits of this peculiar order of household demanded.

Up to 1880, with a few exceptions, there was no serious attempt to combine industrial training of any sort with the schooling of the boys, and the girls were rather employed than instructed in such household duties as would reduce the expense of their living and improve their present crude habits of home life. The religious exercises and moral training of both sexes have been of a decidedly pronounced character, such as is not often found in Christian families. A supervision of the moral deportment of students has been maintained that would neither be desirable nor necessary in "Christian schools" of a similar grade among the white race. Indeed, the declared function of these seminaries has been of the missionary type. They have been supported largely by the churches as "Christian schools." Their teachers in most cases have not only been required to present the ordinary testimonial of good moral character, but also that of a personal professional church membership of the Protestant "Evangelical" type, and their boards of management have almost invariably included at least a commanding majority of the clergy and laity of some distinct religious body of this Christian communion.

On the other hand, beginning with the Hampton Normal and Industrial Institute, at Hampton, Va., a different type of school has grown up, and with some changes ultimated itself in the new State normal and industrial colleges now maintained by nearly every Southern Commonwealth. The Hampton school was organized and became essentially what it is through the presidency of Gen. S. C. Armstrong. This remarkable man came to the work from a long experience among a people in the Sandwich Islands closely resembling the negro. During the war and for several years after the advent of peace he commanded the colored

troops and was trained in the general service of the Freedmen's Bureau. He may truly be said to have been the chief author of an original type of schooling for this people. The basis of the organization at Hampton was industrial, elementary educational, practically Christian, with military discipline. While directly religious and severely moral in the general sense implied in "the common Christianity," it was in small degree denominational, but slightly sectarian, and dealt sparingly with the methods of the regulation church and special agencies for the character training of the pupils. The discipline was maintained under strict military jurisdiction, and the problem of school government in that way was effectually solved, to the great satisfaction of the teaching force. The studies of the ordinary college course were not admitted, and the institution was confined to the acquiring of a sound English education of the superior elementary and public high-school type. A skilled expert in normal instruction was employed from the first, and great stress was laid on the training of teachers for the schooling which was needed both in the graded and ungraded schools of the South. The basal idea of Hampton was a school that should be a model of the life of a good American man or woman destined for American citizenship. The whole organization of the Hampton Institute was pitched on the life of the common people. The school was a crowd of young colored folk learning to be farmers, mechanics of all grades, wives of laboring men, and husbands of working women, who in going out into their new world would not only be self-supporting, but leaders in the great American art of self-help and good citizenship in the communities where their lot might be cast.

This type of instruction and discipline has become more and more pronounced as the years have gone on. The Tuskegee Normal Institute, in Alabama, under the presidency of Mr. Booker T. Washington, has made a new departure in the fact that all the teachers are colored, and no white man or woman occupies any important position save the treasurer and on the board of general management, the institution being one of three public normal and industrial seminaries supported in part or largely by the State of Alabama for colored youth.

The State institutions for colored youth have also followed in this direction. They rarely attempt to deal with the classical department of the college, and are practically large graded schools, from the primary department to the secondary and normal grades, to the extent of a superior free high-school course. They are all industrial, hand work and physical labor being compulsory. Their teachers are almost universally of the colored race. They have no corporate relation with any religious denomination and are responsible in all respects to State control. Indeed they are the proper head of the common-school system for the colored race in whose establishment the South has been engaged for the past thirty-five years, at an expense of nearly \$100,000,000, employing 27,000 colored teachers at an annual cost of \$5,000,000 to \$6,000,000, 75 per cent of which is furnished by the taxation of the white people.

The large number of schools supported by private beneficence, personal effort, and the charity of single churches are generally of the same class as everywhere under similar management—indifferent, good, or better, as they may be.

THE HAMPTON NORMAL AND AGRICULTURAL INSTITUTE.

For the details of the great educational work among the youth of the freedmen by the different classes of seminaries, the reader is referred to the elaborate reports and the mass of contemporary literature in the records of the numerous conventions, transactions, and deeply interesting narratives which, with the constant reports in the press and magazine articles, form an important department in any well-selected educational library. But the original work at the Hampton Normal and Agricultural Institute, in Hampton, Va., is in itself so suggestive, and its first principal, Gen. S. C. Armstrong, was in many ways a man so original and char-

acteristic of the entire work with the freedmen that it requires a special notice in this essay.

Samuel C. Armstrong was born in Hawaii in 1839. He was the son of the Rev. Richard Armstrong, D. D., a native of Pennsylvania, who with his wife, from Massachusetts, from 1837 to 1847 labored as a missionary in the Sandwich Islands. In 1847 Dr. Armstrong was appointed minister of public instruction, in which capacity he served until his death in 1861, having been largely instrumental in building up the system of Hawaiian free schools, 500 in number, with other institutions of superior grade.

Gen. J. F. B. Marshall, for fourteen years acting treasurer and trustee of the Hampton Institute, speaks of this young Samuel as "a restless member of my Sunday school class of 8-year-old boys in the only English church in Honolulu." General Marshall was at this time chairman of the committee on education in the Hawaiian Parliament. Returning to Massachusetts, he served during the civil war on the military staff of Governor John A. Andrew. In 1870 he was brought into connection with his old pupil, then the principal of the new enterprise at Hampton, Va., which has grown into such remarkable prominence during the past thirty-five years.

The youth of young Armstrong till the age of 21 was spent in the best school of general training for his future work. In company with his father he visited the schools in all the inhabited islands of the group and was a close and thoughtful observer of the results of the ordinary methods of missionary work among the natives, whom he describes as "in many respects like the negro race." The strongest impression left upon his mind seems to have been of a fatal lack in the development of moral stamina in this picturesque and in many ways attractive people. Quick to learn from books, devoted church members in the matters of a general support of and constant attendance on public worship, given to family devotions, charming in their hospitality, "they lived pretty much in their old ways; all in one room, without the conditions which make a high standard of morality possible. The 'old man' in them had very much his own way. They were like the people to whom the epistles of the New Testament were written—grown-up children. Despite the faithful preaching of the Christian moralities from the pulpit and the constant visits of devoted women to their homes, with the addition of a severe church discipline and with the positive advance of having been lifted above many of the crude barbarities of heathenism, they remained in a condition well described by a returned missionary: 'Our saints are about up to your respectable Boston sinners.'" There were schools of the higher grade in the islands and one important normal labor institute for boys. The latter, Armstrong relates, "had produced the more solid men."

By this experience at home young Armstrong was grounded in two convictions: First, that the old-time missionary methods had a fatal defect in dealing with the more emotional and superficial elements of a religious life, and leaving out that change in the conditions of living which, more than all other things, determines the character of the manhood and womanhood; second, that although the ordinary collegiate and academical system of education of the day formed accomplished scholars and brilliant graduates, the result was often disappointing, while the training in a solid English education, with manual labor, gave to the people their best teachers and workers. On these two foundation stones the great institution at Hampton was afterwards built.

This most valuable experience, in which no other conspicuous worker for the negro except General Marshall, his associate, seems to have shared, was supplemented by a course in Williams College, Massachusetts, under the presidency of Dr. Mark Hopkins, who, with Dr. Eliphalet Nott, of Union College, New York, made a stronger impression upon a generation of students than any of their contemporaries. To have given to the country such men as Garfield, Dickinson,

Bryant, Armstrong, and scores of others only less conspicuous was a life work exceeded in value by that of few statesmen. Such men are the makers of the statesmen who are called to the supreme post of administration in the crisis of their country's destiny.

Before his graduation from Williams College Armstrong enlisted in the Union Army, and for one year was captain and major in the One hundred and twenty-fifth New York Volunteers. But it was soon discovered that here was the man of all others to lead the newly enlisted colored troops on the Atlantic coast department of Gen. Rufus Saxton. For the two and a half subsequent years he was the lieutenant-colonel and colonel of the Ninth and Eighth regiments of the United States Colored Troops. He was greatly impressed with the general good qualities of his soldiers, especially with their "tidiness, devotion to their duty and their leaders, their dash and daring in battle, and their ambition to improve, often studying their spelling books under fire, * * * and that they deserved as good a chance as any people." One additional foundation stone, in his mind, was laid by this military experience with the negroes, "that slavery was a failure, though doubtless for the time an educational condition." It is observed that in the admirable brief account of himself found in the memorial volume, *Twenty-two Years with the Hampton Normal and Agricultural Institute*, he returns to this fact, the opportunity and influence of negro slavery as an educational institution.

Here, in connection with the conclusions gained in his experience in Honolulu, is found the secret of his success. Instead of descending upon a people like the pagan and African races from above by ignoring or looking upon their former life as the entire cause of their present defects, he realized what a stride had been taken by the American negro from the pagan savage of 1620 to the soldier of the Union and the freedman in 1865. And instead of attempting to lift up this people by educating them according to the scholastic systems of half a century ago, he showed his wisdom in his way of taking them where they were found, and, in the establishment of Hampton, was chiefly concerned to assist in the development of moral discipline, self-control, and reliable manhood and womanhood. He said to the author of this essay: "I have little fear of the abuse of coeducation at Hampton. My boys are rung up at 5 o'clock in the morning, called to military parade before breakfast, kept busy all day till 8 p. m., always under military discipline, and after that hour I will risk all the harm they will do to anybody." In his military service he was in camp at the siege of Richmond and accompanied the Twenty-fifth Army (negro) Corps to Texas for a watch of Maximilian over the border.

In 1866 he was placed by Gen. O. O. Howard, commissioner of the Freedmen's Bureau, in charge of 10 counties of eastern Virginia, with headquarters at Hampton, then a great contraband camp, with almost despotic power "to manage negro affairs and, if possible, to adjust the relation of the races." For two years he wrought at this almost impossible task of lifting the freedmen, demoralized by the charity of two years, to entire self-respect and self-support and to bring the returned white owners of lands in kindly relations, often with their former slaves. Here he was impressed at once with the conclusion "that both classes were ready to do the fair thing." He sent 1,000 of his colored wards to Massachusetts, who were placed in families as servants through an agency of Boston ladies. In the fact that "the better class of the whites were well disposed, but inactive in suppressing any misconduct of the lower class," he exposed the root of much of the race trouble that still exists. The general friendliness between the races, only broken by political excitement, he attributed to the fact that in slavery days the children of both sorts were brought up together, whereas the children of the foreign missionaries were kept separate from even their youthful converts by every means in the parents' power. There were no courts then in operation, and justice was administered by martial law. Scattered negro families were reunited. His testimony to the work of the Freedmen's Bureau is important. He writes: "Gen-

eral Howard and the Freedmen's Bureau did for the ex-slaves from 1865 to 1870 a marvelous work, for which due credit has not been given. Among other things, he gave to their education an impulse and a foundation by granting \$3,500,000 for schoolhouses, salaries, etc., promoting the education of about a million of colored children. The principal negro educational institutions of to-day, then starting, were liberally aided. At a time of vital need Hampton received over \$50,000 from General Howard for improvement."

He found at Hampton on his appearance as agent of the Freedmen's Bureau "an active, excellent educational work going on under the American Missionary Association of New York, which in 1862 had opened in the vicinity the first school for freedmen in the South, in charge of Mrs. Mary Peake." Here 1,500 children were in daily attendance in the old hospital barracks, for several years the one hospital of the Army of the James. Six thousand soldiers had here been buried in the national cemetery. Close at hand was the region connected with the most eventful first years of the history of Virginia—the residence of Pocahontas, the landing of the first slaves in the colonies, later the battle between the *Monitor* and the *Merrimac*, which revolutionized the naval warfare of the world, and the scene of the celebrated order of Gen. B. F. Butler that declared the negro slave "contraband of war." His practiced eye, now trained by thirty years' looking into the heart of the matter, took in the situation, and at his suggestion the American Missionary Association purchased a considerable estate of 125 (afterwards raised to 190) acres on the beautiful shore looking out on Hampton Roads, one of the most charming sites for a great educational establishment in America. To his own surprise he was called to the principaship of the new school, and said "Yes," as a matter of course.

He had no doubt concerning what was to be done. It was "to train selected negro youth who should go out to teach and lead their people, first, by example, by cultivating land and making homes; to give them not a dollar that they could not earn themselves; to teach respect for labor; to replace stupid drudgery with skilled work; and to these ends to build up an industrial system, for the sake not only of self-respect and efficient labor, but also for the schooling of character. And it seemed equally clear that the people of the country would support such a work for the freedmen." He had noticed at home that "ignorance alone was not half the trouble; the chief difficulty was, with them, defective character, as it is with the negro. He is what his past has made him. The true basis of work for him and all men is the simple one—the union of intelligence and manhood; all that follows is of course." His proposition found few friends; the old missionary method still held "the religious public" fast; the manual labor schools of the North had failed. His scheme "would not pay." He replied: "It will pay in a moral way. It will make men and women, as nothing else will. It is the only way to make them good Christians."

In April, 1868, with 2 teachers and 16 pupils, Armstrong, now wearing the title of "general," began work. In 1870 he made his first report, the same year the institution being incorporated under a special act of the legislature of Virginia. "It was a corporation under trustees independent of any association, religious sect, or government. It did work for the State of Virginia and the General Government, for which it received compensation, but was not connected with or supported by them." The fundamental principle of the establishment was, "Nothing is asked for the student that he can obtain by his own labor. He seeks nothing but an opportunity to work his own way."

An institution established on such immutable foundations of experience, common sense, and enlightened Christian philanthropy grew apace, as everything planted in its own soil and tended with care grows naturally and "brings forth fruit after its kind." At the time of writing the admirable essay from which we quote so freely (1893), Armstrong relates that there were 650 boarding students

at Hampton Institute in 24 shops and groups, averaging 18 years of age, 136 of them Indians, 80 officials, teachers, and assistants, of whom half were in the 18 industrial departments and shops, and 300 children in the adjoining county public—formerly the Butler, afterwards the Whittier—school, used as a practice school for the normal department of the institute. The foundation for the good feeling and cooperation of the white people had been laid in that portion of Virginia by the three years' work of General Armstrong in the ten counties adjoining Hampton as an agent of the Freedmen's Bureau, and the legislature made a wise movement in turning over to the principal of the Hampton Institute \$10,000 annually, which the State applied for the use of the colored race out of the land grant of 1862 by Congress for the support of agricultural and mechanical colleges in all the States. The Congress of the United States afterwards offered \$30,000 per annum to Hampton for the education of 120 Indians.

On January 27, 1870, the first meeting in behalf of the new Hampton school was held in Music Hall, Boston. Among its most valuable results was its capture of General Marshall, for a permanent residence of fourteen years at Hampton, as treasurer of the institute. What with the decided impression made by the presence of General Armstrong and the valuable and excellent social acquaintance of General Marshall in Boston, always the foremost of American cities to respond to a call to beneficent action that comes down from the upper story of life, a fountain of supply was then and there opened that has never run dry. General Armstrong always declared that "for continuous and reliable giving New England was distinguished above all other portions of the country." An accurate record of the contributions, often of large sums, from Boston alone, to say nothing of the remainder of New England, would, first and last, include the names of a large majority of the men and women eminent in Christian character and philanthropy for the past twenty-five years. Mrs. Mary Hemenway at once became a devoted disciple of the Armstrong propaganda, and by large and continuous gifts of land and money was a never-failing source of supply. And many less known, though equally interested, were always reliable.

The situation of the school at Hampton was ideal. Fortress Monroe and Hampton Town for many years had been favorite places of pleasure resort. Their nearness to Washington insured a constant stream of distinguished visitors. The winter population thronging the great hotels and neighboring cities was attracted to Hampton first by the novelty of the work, and seldom left the grounds without a contribution, often with a good impression that made for constant aid. Happily, among the early friends were President Mark Hopkins, of Williams College, the old schoolmaster of Armstrong, and Gen. James A. Garfield, also a trustee, a pupil of the same great educator. They insisted that the plans of the young 30-year-old principal should be tried. President Hopkins said: "He will not be satisfied till he has tried his plans; and if the plans fail, he will be the first to see it and abandon them."

In 1893 the school was maintained at a cost of \$155,000. The large sum of \$100,000 was contributed by its friends at the suggestion of the principal. Sixty thousand dollars came in the form of \$10,000 subscriptions. In 1893 the people of the country were contributing \$1,000,000 annually for the support of twenty or more normal and academical institutions, all established by the impetus given by the rapid success of Hampton and stimulated by the education of 16,000 students—2,000 in Virginia alone—for competent teachers, 5,000 of whom being at this date trained in this superior manner. By combining the academical and industrial plan of training, the graduates at Hampton were prepared for successful teachers in the short-term colored public schools, and during the remainder of the year were able to turn their hand to whatever industry they were adapted to undertake. Hampton alone in 1893 had sent out 750 full graduates and half that number of undergraduates, 1,000 in all, of whom General Armstrong says, "but

10 per cent are disappointments." A glance at a map or chart accompanying the interesting work before spoken of shows the location of these pupils more largely in Virginia than elsewhere, but scattered through all the States of the South. A valuable plan of correspondence with the graduates, by which the institution has always been kept in touch with all its children and by which the career of several hundreds of them may be referred to, has been carried on from the first.

In 1878 the plan of the school was enlarged, to try the experiment of schooling the Indians; and several of the worst specimens, then in banishment in Florida, were sent to Hampton. Under the wise and firm management of the school, the success was so evident that Congress voted an annual gift of \$20,000 for the education and maintenance of 120 at Hampton, and also established the famous school for Indian youth alone at Carlisle, Pa., under Captain Pratt, of the United States Army. Out of this came, as a logical sequence, the development of the national policy of educating the Indian children and youth, first through cooperation with different churches, but afterwards by the establishment of the common school among the different tribes and reservations. In 1889 this enterprise received an appropriation of \$2,000,000 from Congress. In future the National Government will withdraw from all cooperation with any church or private association and only subsidize the common schools for Indian children and youth.

One of the most valuable features in the plan of Hampton was its faith in the educational power of self-dependence and solid work. This fundamental idea of the way to teach the negro so commended itself to the Christian common sense of the people that it has drawn to its support one-tenth of the popular Northern contributions to twenty or more of the superior schools established in different parts of the South.

The great element in the wonderful success of this novel experiment in the education of the negro and Indian in 1870 was, of course, the personality of the principal of Hampton. Looking along the lines of this fundamental work, not more important in the long run to the South than to the nation, it is evident that if there was a providence displayed in the statesmanship of Abraham Lincoln and the military genius of Ulysses S. Grant, it was also manifest in the training of Samuel C. Armstrong for the experiment of educating "the nation within a nation," the 10,000,000 of the colored race for American citizenship. First, in his youth, spent in the far-off islands of the Pacific, among a people who had been partially reclaimed from barbarism, needing only the central element of character and industrial training for true citizenship; then, under the influence of Mark Hopkins, greatest of contemporary American schoolmasters; next, as colonel, engaged in the formation of a military colored contingent for the defense of the freedmen in their first experiment of free labor and the reenforcement of the Union Army; again, in Virginia, as agent of the Freedmen's Bureau, getting acquainted with the neighbors of his last twenty years of life at Hampton Institute, Armstrong was fully trained and informed for what came to him as the great right man of genius brought to the right place.

The entire stamina of his manhood was of the military type. He only said what was in his heart when he directed his family and friends to give him "a soldier's funeral." He was not literary save in a "short, sharp, and decisive" style of speech and writing, becoming the grave and perilous work on hand. After 1870 General Armstrong was never off duty, always accessible to anybody worth talking to in behalf of his great experiment. His public speeches read like military reports. Every sentence in his brief autobiographical sketch in the volume *Twenty-five Years' Work in Hampton* is weighted with the significance of a volume. His personal bearing was intensely vital and inspiring. It always impressed the thoughtful observer as if, while listening or speaking, with courteous attention, his eye was elevated toward a point beyond his present horizon. He used to say, "The true way to get things done in obtaining money for new buildings is

to first get enough together to lay the foundations; then bring everybody to look at it, explain it, and ask if such a work ought to be left half done." He refused for a long time to have the old plantation house in which he lived painted, until every visitor declared it "a big shame that such a man should live in a house so shabby." He always appeared like a soldier on the eve of a forlorn hope. "Forgetting those things which were behind and reaching forth unto those things which were before, he pressed toward the mark." It was this decisive and soldier-like air of command, as of a man that was not to be avoided or halted or detained on the march to a great field day, that saved him from the fate of the sentimental, pathetic, supplicating type of philanthropist, and forced every man or woman he deliberately approached to decide at once what could be done about it.

He grasped as by instinct—what really came to him as the result of an experience of twenty years—the correct point of view in the training of an emancipated race, only two hundred and fifty years out of the bonds of African barbarism, tempted as never before was a race of freedmen by the throwing open before it the highway to the loftiest earthly opportunity and the noblest earthly position—full American citizenship. Instead of beginning work from above, lifting the subject by main strength and holding him at a perilous eminence above his own natural standing place, he met him where he found him and along with him began to climb the "steep and rugged way" of his new career. He almost alone among the leading educators of the day understood what every superior man and woman of the slaveholding class of the South knew as a commonplace, that the American negro of 1865 was not the negro of Africa, or of any previous decade of his two hundred and fifty years of bondage. When he said, "The negro in a tight place is a genius," he only put in familiar language the fact that of all races of men he has the most native aptitude for recognizing and assuming the outward elements of a higher civilization. He is "a genius" in manners, in the rapid acquirement of language, in what the Southern people call "the faculty of imitation," which is simply a native capability for acquiring a superior civilization which amounts to a race characteristic. So instead of stimulating this faculty, always sufficiently active and often the most dangerous of his new temptations, Armstrong put his colored boys and girls at once down on "hardpan." He compelled every one of them to take a firm stand on the common level of an American working man and woman, and through a life of wholesome hardship get fairly planted on his own feet as a self-respecting, self-supporting, self-determined citizen of a country where no man honorably and permanently succeeds by being held up by anybody else.

He was greatly favored by the early response of the people to his appeals for financial aid, being thereby saved from the misery of having his institution smothered by an avalanche of raw student material only suitable for a children's primary school. He waited and waited, with a patience as conspicuous as his fiery zeal, until he obtained the class of pupils most favorable to the success of his great experiment. He also fully understood and displayed the ability of every great commander in the choice of his subordinates. He stood up like a granite wall against the assault of the crowd of incompetent men and sentimental women, often of wealth and high social position, that rushed to the work of teaching the negro as a new sensation, hypnotized by his powerful manhood, and accepted only the graduates of higher institutions, people of eminent capacity, and kept only those who were able to find out for themselves the way they should go. It is doubtful if any large school in the country for a generation has retained a corps of teachers more justly celebrated for general ability, good culture, and the personal qualities that go so far with the negro pupil than Hampton.

And long before any of the rival institutions that were established on the foundations of the ordinary denominational academy and college seem to have suspected that their graduates needed anything beside instruction in a course of study

and the general discipline of a good school as the special qualification for a teacher, General Armstrong, at Hampton, had organized one of the most effective normal-school departments in the country, placed at its head an expert woman, second to no person in like position, and, in addition to his own able work, after the style of President Hopkins with his senior class in the Butler, afterwards the Whittier graded county school, had organized a complete practice department for the use of his pupil teachers. All his graduates were first carried through an English academic course, modeled after the best existing arrangements for common-school instruction. The industrial department was handled as an auxiliary to, not a substitute for, a good elementary and, if possible, a secondary English education. With the increasing duties of the principal, the necessity arose for a more stringent correlation of work and supervision of the large body of instructors. At a later period, Miss Hyde, the accomplished principal of the normal school department, was promoted to the office of general supervisor of the academic work, thereby providing against the danger of the undue prominence of any special teacher or group of instructors, sure to bring in a lopsided condition of affairs in which a few people of superior executive power gradually usurp the entire control of the institution.

But it was in the influence upon the character and life of every pupil of sufficient ability to be impressed by it that the growing excellence of the Hampton Institute was more and more indicated. Its chief characteristic was a community, always under a firm and conservative head, with no lack of the "zeal according to knowledge" which shines out through the whole field of religious living. There was no breaking forth like a spring freshet in a flood that bears along its destructive course the refuse of fields and villages and leaves the barren waste of a drenched and smoking wilderness behind. But the institution itself was a proper "fitting school" in the true Christian education that culminates in the life of love to God and love to man. Those who came out, after a fair trial, seemed to have gained a positive conception of the new liberty of the race, not yet half understood. Their education at Hampton inclosed them as with a high wall of protection. Notwithstanding the inexorable military discipline of the institution, which in itself developed a fine soldier-like pride in law and order, there was always within its limit ample room for the development of a self-respecting and self-poised manhood and womanhood. The variety of exercises relieved the monotony of repetition and made life at the institute a constant source of entertainment. The kindly and home-like spirit that sought every proper opportunity for healthful amusement, the charms of an ever varying landscape, the opportunity for games, and the daily spectacle of the military dress parade, made life a new thing to the lawless and vagrant. Indeed, from the first Hampton school was a university of the new American life, where its pupils at once seemed to realize the almost miraculous change that had come to their people.

The industrial department of the institution was managed with a skill and carried on by a method that gave a new significance to that still so greatly misunderstood side of modern school life. The old-time manual-labor school did not pretend to teach even the rudiments of the different industries carried on within its walls. The school claimed a certain number of hours each day of the sort of work that the student was supposed best able or willing to perform, with the sole purpose of lessening the expense of his education. Under its monotonous discipline labor remained the "old man of the sea," perched upon the shoulders of every wearied student, and as the American negro for two hundred and fifty years had tested the value and the mortal weariness of this type of "industrial education" to the bitter end, it was not strange that the pupils of Hampton and all these great seminaries came with a prejudice against hard work that amounted to a longing for a paradise of literary laziness. It was incessantly proclaimed by many of the foolish preachers and politicians who had been drifted to the front by

the upheaval of that time that industrial education in schools was only a new device of the "despotic white man" to reduce the colored people to the rank of a perpetual peasantry. The regular old time college curriculum was welcomed as the "bow of promise" in the storm cloud that overhung the race, as the highway by which the emancipated 5,000,000 should march upward to permanent prosperity and power.

Many of the leading presidents and professors of the new "colleges" and "universities" that sprung into life, organized according to the average idea of the religious public of every sect, were young soldiers, like Armstrong, going from the field to the college, with none of his previous experience of educational life, or young scholars preparing for the Christian ministry, carrying "down South" their entire stock of lofty enthusiasms and exaggerated expectations. Of course there was among them an inevitable, sometimes an "invincible ignorance" concerning the nature, capacity, and present mental and moral condition of their students. Thus it came to pass that as late as 1880, on the first visit of the author of this essay to the most important of these schools, he found a decided reluctance in many of them to take any hearty interest in the feature of industrial training, or, if such an attempt had been made, it was often with the old-time idea of providing work by which student aid could be secured for pupils in the academic and college grade. With few exceptions, the Hampton Institute was the only great school at that time, fifteen years after the founding of many of the most important of them, where there was any very great and intelligent interest in the training of the hands save from the labor of the girls at ordinary housekeeping and table service, and that not regarded as an educational exercise.

But despite all indifference or disparagement General Armstrong went steadily on his way, every year scoring some new success, confident that his idea would finally be adopted by the common school as distinguished from the "Christian school" public of the whole country. His instinct in this respect was prophetic. As soon as the States of the South had been encouraged by the aid of the Slater fund and the demands of their most influential colored citizens to assume the training of selected teachers for the country district and village and city graded schools, Hampton appeared as the model institution from Washington to Texas. Every one of these State schools now in operation is a more or less faithful copy of the Hampton Institute, only claiming to be a common school of the higher-graded type, with ample provisions for the training of teachers and a compulsory industrial department.

Even beyond this influence in determining the best type of State education for its colored youth, these commonwealths have patterned after Hampton in perhaps the most original of all the new developments in Southern education—the organization of the normal and industrial free college for white girls. Beginning twenty years ago in Mississippi, this improved type of the Southern "female college" is now in operation in Georgia, Alabama, and the two Carolinas, with the prospect that it will finally be adopted by every Southern and possibly by some of our Northern States. It would be the best possible type of the common school to introduce into our colonial possessions, which are opening up a new world for the expansion of the American idea of universal education.

It was only necessary that this type of the blending of the academical, normal, and industrial education in one great organization should be carried to its logical finish, in being placed entirely under the instruction and discipline of a colored principal and faculty, to vindicate the genius of General Armstrong in giving to the South and the country the most effective object lesson of its success. It was at first held by its critics that, although under the direction of an exceptional head, with teachers nearly approaching experts, the majority graduates from the most celebrated schools of the country, such a peculiar educational arrangement might succeed, yet it would fail when brought to the test of a great gathering

of ordinary colored pupils under the entire control of teachers of their own race. But the same good Providence that directed General Armstrong to Hampton put it into the heart and mind of a little boy, born in a one-room cabin with mother earth for a floor, trained in a Virginia coal mine, to steer his frail ship toward the great lighthouse of Hampton Roads. It was in the Hampton school, as a student, a worker, and finally as superintendent of the Indian department, that Booker T. Washington learned the art of building a new model Hampton, down in the black belt of Alabama, with a student constituency representing perhaps the least hopeful side of the colored population, not only the teachers of the academic, but of every industrial department drawn from his own race, like Hampton subsidized and to a greater extent than Hampton controlled by the State; like Hampton growing constantly in favor with the better side of Southern society, while so attractive to the people of the North that, in less than twenty years from its establishment, there is probably no American school that receives so large an annual contribution from all classes of people.

And that here again this great success may not be dismissed as the exceptional work of a man of uncommon genius, the new Hampton at Tuskegee to-day furnishes the model on which every Southern State is now building the most valuable type of college for the training of the superior class of its 10,000,000 colored citizens. It has not been chiefly the extraordinary genius of Armstrong and the ablest of his pupils that has so commended this type of school to the national confidence that the most exclusive institutions of the ecclesiastical Northern and Southern type are more and more compelled to take on the characteristic excellencies of the Hampton plan. The crowning genius of these remarkable men was in seeing at once not only the possibilities of this type of superior seminary, but demonstrating its necessity to the colored people and in every case bringing it into line with the State system of public instruction, on which 16 Southern States have expended \$500,000,000, including \$100,000,000 for the colored children, during the past thirty years.

The experiment of combining the education of the negro and Indian at the Hampton Institute was a stroke of genius. General Armstrong saw at once that the talkative, social, and magnetic negro was the providential companion of the shy, silent, proud-spirited Indian. The result of this twenty years' training of the native red man of the West on the Atlantic shore, where he was first encountered by the coming master of the continent, has belied most of the dismal prophecies of its opponents and opened the way to another triumph of Armstrong's genius in the final establishment of the American common-school system for the children of this race in their own homes. Ever since the discovery of America by Columbus, the ecclesiastical authorities have labored at the almost hopeless work of civilizing and making good citizens of the different populations of the American continent by the method of changing the mode of their religion and combining with this effort a certain amount of the sort of academical training common to the denominational religious schools of the past four centuries. It would almost seem that the chief success of this method had been the saving of a select few to live as a sort of curiosity in the society of the dominant race, while the mass have either been long ago exterminated, as in the West Indies, or held in military submission, even in this Republic. It was given more completely than to any previous educator to Armstrong to understand that the only successful way of converting the native American savage to the religion of a civilized country was, first, to take him from his isolation and place him in contact with the common life of the common American people; teach him the industries, the habits of life, and the general way of doing common things that has everywhere lifted the white man out of a similar barbarism; give him a common-school education—in short, make his daily life an object lesson of what the Christian religion can do for a people as contrasted with the squalor, poverty, and slow destruction of the life he is now

living. To have done this, as it has been inaugurated at Hampton and Carlisle and put in operation even to the present degree among the Indians of the West, is glory enough for one man, and in itself assures to Armstrong a foremost place among the educational statesmen of his country and time.

It will be a great help to the whole class of prophets of dismay who see in our new national assumption of a great colonial life, involving the control of new millions of the lower orders of mankind, only a stupid repetition of the old policy of "imperialism," if they could realize the prodigious significance of this great experiment at Hampton in the education of all races of men in their progress from pagan barbarism to a self-relying Christian civilization. It is not so much fortunate as providential that the country has not been called to face this mighty responsibility of dealing with these new millions of the little children and wards of Christendom until, by a thirty years' experimenting at home, it had not only discovered but put in operation in every Southern State, by the agreement and cooperation of all sections, the Hampton methods of training the lower majority of this world on the lines of a Christian civilization.

The only remaining question raised by the splendid success of General Armstrong at Hampton was whether all this, like so many of the great things of this world, was not after all an annex to a great man which at his death, like the "cloud-capped towers" of the poet's vision in the heavens, would "dissolve and like the baseless fabric of a vision leave not a rack behind."

The men of genius in executive affairs are of two sorts. First is the man whose genius for organization and administration is centered on himself and is, at all points, involved in his own despotic control of his fellow-man. His work depends chiefly on himself as its "author and finisher"—a work whose secrets nobody but himself can understand and which nobody else can touch except on peril of pulling it down upon his own head. Opposed to this type of ruler of men is the man who goes through this life studying and by his own genius discovering the divine, natural, scientific, immutable laws by which human society must be organized and every human institution fashioned into the self-perpetuating factor of a progressive civilization. This man, as he does not "live to himself," so he does not "die to himself." He leads his fellow-men by living with them, and even more by his own way of living and action than by the subjugation of others to himself shows the better way by which families, communities, and States can be led "in the way they should go" and taught to fashion the institutions which shall become the great agencies of this work.

Of the latter type of men, of the organizing and executive sort, was Armstrong. Like the majority of able men nowadays called to the presidency of our rapidly developing educational foundations, he was compelled more and more to live away from home. He only taught his senior class in a course that, under the name of "mental and moral philosophy," included a practical training in American manhood and womanhood. For many years he was severely tried by the absence of the efficient supervision of his large company of teachers, some of whom resented the idea of any pretense of control within their own beat. But in his later years he was able to secure this great advantage. In 1893 he says truly: "The present efficient force of officers and teachers could manage successfully every department of the school should its head be taken away. In twenty-two years it has attained a life of its own; it would be poor organization and development that would not, in that time, have realized this point. It might once have been, but is not now moved by a one-man power. The change will come and the school will be ready for it."

Even before the faithful principal wrote these impressive words the end was approaching. It was befitting a man so burdened with a mighty labor, a labor that proposed the organization of a new type of school, which should become a national institution, destined to lift not only the negro but all similar races to a

new civilization which should be the basis of American citizenship, that he should lay down his own life on the altar raised by himself for the worship of the cause to which he had given his best years. No one could talk half an hour with General Armstrong, even in that peculiarly unconventional mood when he could become the most charming of men, without noting his mysterious mental absorption that reminded of a vast "beyond," seen by him alone, and with which he lived in perpetual communion. As the years went on it was evident to those most concerned that the great leader was more and more living in his own vast ideals which nobody but himself could realize, and he certainly not in this world. By the stringent policy necessarily adopted by his board of trustees, he was only half persuaded to restrain "a noble rage" for expansion that alarmed his prudent friends, lest his sudden death should leave the school under a crushing load of obligation. He was induced to announce that, hereafter "not an expansive but an intensive policy" would rule in the administration. But no body of directors and no consideration of a limited policy could hold in leash the principal of Hampton, who, with the ardor of a young captain of "rough riders," plunged anew into the dear old work of pleading before the people for his children. He fell, like a good soldier on the perilous edge of a charge up hill, in the midst of an address in a village church in Massachusetts, on Thanksgiving Day, and only lived on the borders of the grave long enough to gain the steadiness and peace to step up into the greater command that awaited him in the grander campaign beyond.

In his last words (left as "memoranda") to the school and the world, he concentrated the lesson of his life, a life that had already become a vital force in the Republic.

For, in the organization of the Hampton Institute, General Armstrong accomplished a work that may be compared with that of Horace Mann. While the American common school, by the great revival of 1830 to 1860, had to a large extent adjusted the system to the expanding needs of the Northern States, making it cover the entire space between the old-time district school of the rural section and the new graded school for all sorts and conditions of children in the great centers of industry up to the State university, academical and industrial, it had not really been able to solve the great problem of the South—to lift up a third of the population of a vast area, in sixteen States, in range of the dominant class. The prodigious effort made by all the religious bodies of the country to lift up these millions of illiterates, only half a generation removed from chattel slavery, to full American citizenship by the training of a superior class for leadership in a type of institution modeled on the denominational religious college and academy of half a century ago, assuming their names and giving their teachers the highest titles of the secondary and higher degrees, during the first thirty years following the civil war, did accomplish a work than which the American church has done nothing better. It is impossible to see how, without this agency, in which perhaps \$50,000,000 of Northern and national money have been invested, the public-school system for the colored folk could ever have been built up even to its present unsatisfactory condition.

It should also be noted that in doing this the American Church, North and South, has learned a great lesson—that it can not permanently maintain for its denominational seminaries an assumption of moral and religious superiority by conferring on them the title "Christian," and on the people's common school the name "secular." Indeed, these great mission schools in the South have been built up to their present efficiency far more by the interest of the people of their own religious connections in the new Southern common school for the negroes than by any permanent concern for sectarian propagandism. Their ablest managers and teachers on the ground from the first have seen that their real work was to train the greatest number of youth possible as teachers in the common schools and leaders in the new industrial, home, and social life of their great constituency.

The schools of this sort that are now most thoroughly committed to this policy of discouraging the multiplication of private and parochial schools and urging their graduates to lead the people in building up their own public-school system, and by living with them in every trade and profession hasten their preparation for good citizenship, are not only the most useful but are most certain of future support.

With no disposition to discourage the higher education, even in the limited curriculum of half a century ago, for any student competent to receive and make a high use of it, the educational public of the whole country is more thoroughly convinced every year that the central obligation and opportunity of all these institutions to-day is to increase and improve their facilities for training good teachers for their people's common schools, and make their own foundation at least a "college" or "university" of a genuine American life to its students. Sooner or later, while the majority of these local seminaries will disappear, a few score of these establishments will remain, under fit management, representatives of a superior training in every department—one of the noblest contributions of Christian missionary zeal, ability, and self-sacrifice to the suffering South, for the sake of the Union, in the history of our own or any Christian nation.

But it was evident to General Armstrong from the first, while in hearty sympathy with the Christian spirit that has prompted this great work, and, like all first-class American educators, profoundly convinced that the training of a character based on a solid religious and moral foundation is the fundamental work of every good school, that the work to be done in the South could never be accomplished by the old-time sectarian missionary methods, of which, even a generation ago, he had seen the last outcome in his own island country. He saw also that the Southern people could never be permanently educated at the expense of the nation, much less by the efforts of the rival Christian sects of the North to build up great centers of denominational propagandism for the training of the freedmen. The reconstructed South was not to be an annex to the North in any way, but a group of American States relieved from the great burden of the past by war, each reconstructing itself in genuine American style. The majority of the Northern churches were and still are, unfortunately, out of fellowship and practical cooperation with those of similar name in the South, and the large majority of the negroes are organized in churches under their own ministry. He felt that in building the final type of school for the freedmen he must escape all the pitfalls of denominationalism, while keeping his institution a broad and devout representative of the common Christianity.

He saw, again, that the final educational arrangement for the negro must be in some sort of corporate relation with the common-school system of the South; so he at once organized under the laws of Virginia and made Hampton a representative of the State by the disbursing of a portion of its industrial education fund to its colored citizens. He also understood that the negro, for a century to come, would be in no condition to be educated, even in his superior class, by attendance on the different types of schools developed at the North. This could only be done by working an extensive system of student aid from the North, which would at once demoralize a generation of colored youth and finally exhaust the patience of the most zealous givers.

What was needed was a new type of school, an educational arrangement that should receive such as were able to live under it, where every pupil should learn the whole art of living by his own effort; be compelled to conform to a severe discipline, truly Christian in its spirit, but, like the Christian life, "a strait gate and a narrow way;" be thoroughly drilled in some method of honorable self-support, with as much good schooling of the common-school type in the elementary and secondary grades as could be carried on in connection with everything else; the opportunity of learning how to teach a good common school, and, as far as possible,

through summer annexes, indirectly be qualified, under fit conditions, for a genuine Christian ministry. To combine all these departments and agencies in one school and put such a life into it that it would commend itself at once to the whole American people, North and South, and become a permanent contribution to American education; nothing less than the last achievement of Christian philanthropy to lift up the lower races of the world into line with modern Christian civilization; this was indeed a work of educational Christian statesmanship whose results only the genius of its master builder could compass.

Armstrong lived to see the scheme adopted, largely under the leadership of teachers like Booker Washington and other good men and women trained at Hampton, by every Southern State and already carried to a point, both in the training of the colored and white children of the South, that marks it one of the future permanent agencies of republican civilization. His most eminent disciple, Mr. Washington, has at once grasped the larger meaning of its application to the needs of the colonial policy on which the Republic has finally entered by suggesting the training of young men and women from the West and East Indies at Tuskegee, who would then inaugurate new Hamptons and new seminaries of the type of the Southern State normal and industrial school for colored students and white girls in all these newly acquired lands.

This attempt to set forth the real work of General Armstrong may be fitly closed by the republication of the estimates of his coworkers and friends, as set forth at a memorial service held at the Hampton Institute a few months subsequent to his death, and his last words, an educational "will and testament" worthy of this great and good man not yet half understood by the people for whom he gave his life:

REMARKS OF REV. W. E. STRIEBY, D. D.

In 1861, seven months after the fall of Fort Sumter, the American Missionary Association started a school for freedmen near where we stand; then one at the Butler School on these grounds; then Camp Hamilton, with 1,500 pupils from the contrabands' cabins all around. Then, in 1866, General Armstrong came as an officer of the Government in the Freedmen's Bureau, to take charge of the refugees and contrabands and abandoned lands. But he saw that for the 1,500 pupils who had been for five or six years under instruction a change was needed. He communicated his ideas to us and cheerfully and promptly we acceded, and this Hampton school was started. In 1867 we bought 120 acres here for it. The next year this Hampton Normal and Agricultural School was opened and General Armstrong was at its head. In 1869 he first appealed for a permanent building. The question was what to do. There was the old Chesapeake Female Seminary, now the Soldiers' Home, which could be bought cheaply. General Armstrong felt strongly opposed to it, and induced President Mark Hopkins and Gen. James A. Garfield to come down and help discuss the matter. We all met on the veranda of the general's house, with also the superintendent of schools of Connecticut (Mr. B. G. Northrop), Mr. Alexander Hyde, of Massachusetts; Mr. E. P. Smith, afterwards Indian States Commissioner of Indian Affairs, and myself. We talked the matter over. I said, "That is the best thing to do, to buy the seminary building." General Armstrong was inflexibly opposed to that. At last President Mark Hopkins took me aside and said we had better let General Armstrong do what he wants to, and so we did. If General Armstrong had been a common man I would have been right; but I was wrong, because General Armstrong was not a common man; he was a great man. He was great in his magnetic power over men. When this stripling of a young man would talk over with us the matter of the site of the school he could induce a Hopkins and a Garfield to come down to Hampton and be on his side. And ever since he has been drawing the Hopkinses and Garfields to him and to his board of trustees. My associates will not hear me when I say I have never known a body of more power, and never have I known a body of teachers superior to those he has gathered here, nor a body of students so magnetized—mesmerized—by one great spirit as here. General Armstrong was a great man in his broad plans and bold measures.

He tells us that the vision of Hampton, essentially as it now exists, was in his mind back in the days of the war. So when he took up the work it was all in his mind. The day we met on the porch of his house there were only two brick houses

and a few barracks and shanties on the place. But he saw it all, and the rapidity and vigor with which he pushed it into visible shape astonished us. We used to say, "Every year we come we see two or three new buildings." We would say, "General, this is large enough, we can't go any farther." "Oh, yes," he would say, "no more buildings." But the next time we would come there would be one or two more under way. Once when two corner stones were to be laid on an anniversary day (Winona Lodge and Stone Building) I was to speak at one and Dr. Potter, of New York (afterwards Bishop Potter), at the other. A little rain fell, and I said, "Dr. Potter, you had better wait; it will be over in a few minutes." "Oh, no," said Dr. Potter, "if I wait General Armstrong will have another corner stone started." But the General was not only great in making plans. Many a fool can make plans and get in debt for what he can't carry out. It is the mark of a great man to keep his plans in hand, and that is what the General did. A teacher here has told me that he knew the condition of every building from garret to cellar. So he knew all his business. He was great, too, in knowing how to select his subordinates. He said to us, "I am not indispensable to the school. I am dispensable. I can go to California and the Hawaiian Islands, because I know those I leave will do what is needed and the work will go well." To show us that he was not led away by visionary schemes, he would show us his balance sheet. And whatever perplexity or trouble there was I never knew him to whine. He never said to us, "Oh, what trouble we are in, won't you help us out?" but "I am going to do this, and that, and get us out." He made me think of Napoleon, who, after a battle had gone against him, gathered his forces under a tree, and instead of talking of the defeat, began to say, "I am going to do this and that to-morrow." One of his generals exclaimed, "Sire, thou art worthy to command us." So we felt that we had in General Armstrong a worthy commander and guide.

REMARKS OF MR. BOOKER T. WASHINGTON.

A few nights ago, while I was driving through the woods of Alabama. I discerned in the distance a large, bright fire. Driving to it, I soon found out that by the glow of this fire several busy hands were building a nice frame cottage to replace a log cabin that had been their abode for a quarter of a century.

That fire was lighted by General Armstrong, years ago. What does it matter that it was twenty-five years passing through Hampton to Tuskegee, and through Tuskegee Conference to that lonely spot in the lonely woods? It has done its work effectually all the same, and will continue to do it through the years to come. It is a serious embarrassment to me to speak of General Armstrong. It would be comparatively easy to speak of him as our teacher; but he was more than our teacher. He was the heart of our race, and held us so strongly and tenderly in his great heart that it broke at the time when most men have just begun to live. It would be comparatively easy to speak of him as our friend, but he was more than friend—that word is cold and barren. General Armstrong and the power of his personality and influence over his students, his tenderness, his love, his confidence in them, was so indescribable that I hope you will not think it irreverent if we not only reverence, but almost worship him. But General Armstrong would be the last to wish us to utter mere abstract words of praise. Every spark of energy in him was connected with some purpose, lifting up the unfortunate of the black and red and white races. Here in Virginia you know how his life penetrated, but what of his influence in the "Darker South?" I hope I shall be pardoned if I speak from experience and show by Tuskegee how his work is marching on. The rose I placed on his grave is his work at Tuskegee. To-day it is a light-house for the country about. Eleven years ago it began with 30 students and 1 teacher; to-day it has 600 students and 34 teachers. Then it had scarcely a dollar and not a foot of ground, now it owns 1,400 acres and 28 buildings—a plant representing \$180,000. Then it owned one blind horse; now it owns 260 head of live stock. Then the present school ground was an old plantation that had known only labor forced by the lash. To-day it has 14 different industries carried on by 600 as happy-hearted workmen and women as there are in America. Then it was questioned if the negro would work. Now 17 out of the 28 buildings are put up by the labor of the students. But our great chief taught us that all material advancement is as nothing except as it contributes to the elevation of manhood, of character.

REMARKS FROM SPEECH OF COL. THOMAS TABB.

When I am requested to speak of General Armstrong's relation to this community which I have known for twenty-five years, I could not fail to make my tribute to his memory and worth, however humbly. More than twenty-five years of this

nineteenth century, grandest of all the ages, with its magnificent development, its splendid progress, its grand achievements, and its grander men, have swept into the past since General Armstrong first came into this community. I knew him as a young man in the pride of his early manhood, and ever since till we laid him to rest in yonder cemetery—and who does not know how fair and famous that life has been? It was my privilege to meet him early in his official capacity as an officer of the United States Government. I refer to the past because I can not speak fittingly of the memory of General Armstrong without relating the circumstances that brought him here. Go with me to the dark days of 1866. All was not beautiful here then as it is to-day; all was ruin and desolation in the track of war. You can not realize the wondrous transformation these years have wrought. My own people were returning again, ruined in fortune, with blighted hopes, to their once happy homes. Those of them who stood on the verge of life could only think of those happy days never to return. Hither was returning the ex-Confederate to his home; here came the matron a widow and childless, who in 1861 had bidden husband and son go forth to battle, her loved ones sleeping on the heights of Gettysburg or in the shades of the Wilderness or Chancellorsville. Thousands of colored men and women, who had fled here as to a city of refuge, were occupying our lands and abiding in our homes. I say it not to their prejudice; such is not my purpose; no man appreciates their fidelity as a race more than I; they have my best wishes for their welfare, but naturally too many of them thought liberty meant license; freedom, exemption from labor. General Armstrong came here as a representative of the Freedmen's Bureau. Here laws were silent, courts closed; the bureau administered justice between man and man. Many were embittered. But he impressed this community as no man of his predecessors had done. We came to regard him as a true, brave, just, impartial man and well he met the difficulties of the hour, impartial to white and colored, a just man, and discharging his duty fearless of consequences and in the fear of his God. Some sweet memories come back to me of his goodness to my own people. The bravest are ever the tenderest. He passed from the Freedmen's Bureau to the organization of this great school. Methinks there was something in his environments here which spoke to him as the voice of destiny. It may not be that our great Creator speaks to us as to Moses and John, yet He speaks to us, and if we would give heed there would be more and grander men than there are. Yes, he heard the voice which would speak to him and, like John on the barren island, he gave heed to that voice and God pointed out to him his destiny and so this school arose. I well remember its beginning. How unpromising! I can go back twenty-five years and recall how it started with 2 dilapidated houses, old hospital frame buildings, 2 teachers, and 15 pupils. What has he accomplished here? These 600 students bear witness. These magnificent buildings tell the story of his great life. Beyond all this, the hundreds of young men and women going all though this land to elevate their people to a higher plane of manhood and womanhood—these speak more eloquently than I can speak of the work and the worth of General Armstrong. Michael Angelo liberated the angel from the block of rough and shapeless stone; General Armstrong has been a greater Angelo for two races.

SPEECH OF REV. DR. WAYLAND.

I don't know what I can add to all the fine and impressive things that have been said of General Armstrong. Great he was—he thought of what seemed impossible as something that must be done, and he did it. A soldier, he drew his sword only in behalf of justice, law, liberty, and love of God and men. A statesman, he had wisdom to see that when the war was over it was only half done. He had seen multitudes lay down their lives, the Potomac and the James run red to the sea, to achieve bodily freedom. But he saw the souls were still to be set free, and to that end he devoted his life. A Christian, he saw that God had given to him the mission of bearing, living, suffering for others, and that the divinest thing in humanity is a life devoted to man's redemption. We call him dead, but his presence was never more truly felt. From that picture, from that grave, he speaks to us, and yet more from the class room, from the church, from workshops, from cabin and cottage, and says, "I have borne this burden for men, so do you; and as I carried this load of labor, care, and love on my heart till it ceased to beat, so do you no less." These sixty buildings are a monument to him, compared with which Trajan's column is an inanimate block; these shall always speak. And he has other monuments in the hearts of men. So long as an Indian or a negro mother shall teach her child the name of Jesus and tell him of the great-souled man who here for a quarter of a century worked, watched, and died, so long his memory shall not fail from the minds of men.

General Armstrong's "Memoranda," left to be read after his death, have already been given to the press, as was but right—a legacy of inspiration to all who read. Certain clerical errors and omissions are corrected in the copy below, which is a carefully accurate transcript of his original manuscript.

MEMORANDA.

Now, when all is bright, the family together, and there is nothing to alarm and very much to be thankful for, it is well to look ahead, and, perhaps, to say the things that I should wish known should I suddenly die.

I wish to be buried in the school graveyard, among the students, where one of them would have been put had he died next.

I wish no monument or fuss whatever over my grave, only a simple headstone; no text or sentiment inscribed, only my name and the date. I wish the simplest funeral service, without sermon or attempt at oratory—a soldier's funeral.

I hope that there will be enough friends to see that the work of the school shall continue. Unless some shall make sacrifices for it, it can not go on.

A work that requires no sacrifice does not count for much in fulfilling God's plans. But what is commonly called sacrifice is the best, happiest use of one's self and one's resources—the best investment of time, strength, and means. He who makes no such sacrifice is most to be pitied. He is a heathen, because he knows nothing of God.

In the school the great thing is not to quarrel; to pull all together; to refrain from hasty, unwise words and actions; to unselfishly and wisely seek the best good of all, and to get rid of workers whose temperaments are unfortunate, whose heads are not level, no matter how much knowledge or culture they may have. Cantankerousness is worse than heterodoxy.

I wish no effort at a biography of myself made. Good friends might get up a pretty good story, but it would not be the whole truth. The truth of a life usually lies deep down. We hardly know ourselves. God, only, does. I trust His mercy. The shorter one's creed the better. "Simply to Thy cross I cling," is enough for me. I am most thankful for my parents, my Hawaiian home, for war experiences and college days at Williams, and for life and work at Hampton. Hampton has blessed me in so many ways. Along with it have come the choicest people in the country for my friends and helpers, and then such a grand chance to do something directly for those set free by the war, and, indirectly, for those who were conquered. And Indian work has been another great privilege.

Few men have had the chance that I have had. I never gave up or sacrificed anything in my life; have been, seemingly, guided in everything.

Prayer is the greatest power in the world. It keeps us near to God. My own prayer has been most weak, wavering, inconstant, yet has been the best thing I have ever done. I think this a universal truth. What comfort is there in anything but the broadest truth? I am most anxious to get a glimpse of the next world. How will it all seem? Perfectly fair and perfectly natural, no doubt. We ought not to fear death—it is friendly. The only pain that comes at the thought of it is for my true, faithful wife, and blessed, dear children. But they will be brave about it all, and, in the end, stronger. They are my greatest comfort.

Hampton must not go down. See to it, you who are true to the black and red children of the land and to just ideas of education.

The loyalty of my old soldiers and of my students has been an unspeakable comfort.

It pays to follow one's best light, to put God and country first; ourselves afterward.

Taps has just sounded.

S. C. ARMSTRONG.

HAMPTON, VA., *New Year's Eve, 1890.*

CHAPTER XII.

LETTER CONCERNING THE ESTABLISHMENT OF A NORMAL SCHOOL FOR THE WOMEN OF VIRGINIA.

ADDRESSED TO THE TRUSTEES AND FACULTY OF HOLLINS INSTITUTE, BOTETOURT
SPRINGS, VA., AUGUST 20, 1864, BY EDWARD S. JOYNES, PROFESSOR IN WIL-
LIAM AND MARY COLLEGE AND ACTING PROFESSOR IN HOLLINS INSTITUTE.

GEORGE P. TAYLOR, Esq.

President of Board of Trustees of Hollins Institute, Virginia.

SIR: The approaching meeting of the board of trustees of this institute, over which you preside, when, as I understand, the future policy of the institute, both during and after the war, will be discussed and determined, furnishes me the occasion for addressing to you, and through you to the board of trustees, some views and recommendations which I trust may be found worthy of consideration. The present condition of our country, its prospects and future wants, particularly in the interest of education, as a chief element of its independence, give a peculiar present importance to the subjects which I shall present. The position of this institute, as the oldest and largest female seminary in Virginia, renders it, moreover, proper that the trustees and faculty should more profoundly consider their duties and their opportunities with reference not only to the institute itself, but to the wants of the country under the highest views both of professional and patriotic obligation. I am encouraged to believe that any considerations touching these subjects will be favorably received by the trustees of this institute, and that whatever views may be adopted the responsibilities which they represent will not be disregarded. My sense of the vast and enduring importance of these interests to national as well as to social and individual welfare, and the acknowledged influence and reputation which this school enjoys, encourage me to address you especially on this behalf; and I feel that I may do so the more freely because, while deeply interested in its success, I am yet connected with the institute only by a temporary tie, and have my permanent position and interests elsewhere and in a different sphere.

Among all the interests and influences which comprehend the character and welfare of a people there is no one more important than that of education. This embraces the very sources of the national life, and, conceived in its moral as well as its intellectual aspects, it may almost be said to be omnipotent in its influence upon national character, as well as upon social and individual welfare and happiness. The school, the church, and the family, which are all embraced in its full signification, are the great laboratories in which the elements of a nation's life are combined and wrought into power, and in these, in their constitution and character, their influences and traditions, their teachings and discipline, will be found the key to the intellectual and moral life of the individual and the people. One of these receiving the child at its birth and attending the man in one relation or another throughout life surrounds him with influences and sanctities silent and innumerable that can not be analyzed nor described. Another comprehends his relation to his Maker and embraces the inscrutable mysteries of the heart, which none but himself and God can penetrate. For these reasons, being thus of the

nature of individual and sacred concerns, they are less the subject of discussion or of control; but the school, which, though hardly less individual in its importance, is yet public in its character and social in its constitution, is therefore the more appropriately matter of public concern, and questions of education have at all times engaged the attention and discussion of thoughtful minds.

And such questions are, indeed, not only of vital importance to each individual and family, but they possess a universal and patriotic interest at all times. The school and the schoolmaster occupy the very fulcrum of intellectual and moral influence upon the young. They contribute the materials which shall form by assimilation the substance of the future mind and character. They determine, by early discipline and example, [the quality of] reasoning and judgment, and in no small degree, also, of feeling and of conduct in after life; and beyond the sphere of mere instruction, and in a far more important sense, the associations and the habits, the standards, the examples, the traditions of the school, woven into the web of early growth and habit, constitute oftentimes the most powerful elements in the formation of the intellectual and moral character in after life. The agencies, therefore, which convey these influences can not be of slight importance. The institutions of education constitute, indeed, in all their peculiarities, a most important and characteristic part of civilization of a people. In their several departments of action and of influence, both moral and intellectual, in their constitution and conduct, their government and discipline, their methods and subjects of discussion, they are indeed of vital interest. In all nations, just in proportion to their advancement in intelligence and civilization, they have received the attention of thoughtful minds and a well-constituted system of education and educational institutions is regarded as among the highest glories of a nation.

But if this is true, if these things are important at all times and for all peoples, then are they especially so for the South and at this time. We stand, indeed, on the threshold of a new civilization. For this people "old things have passed away and all things have become new." A little while hence, and, God helping, they will stand erect, a bruised and shattered remnant, it is true, but yet a people and a nation, clothed with a blood-bought independence and endowed with the rights and responsibilities of liberty and self-government. Through the sacrifices and the victories, the agonies and the glories, the trials and the triumphs of this great war, they will have won for themselves a place and a name among the nations of the earth and laid the foundations of their own national character; and beneath the inspirations of this great struggle—under the influence of its discipline and sufferings—by the light of its profound teachings, they will begin to make their own career and to work out their own civilization and destiny in the history of the world. That this civilization will be a new one, in comparison at least with their past history, that a profound change will have come over the condition and character of the people, affecting at once all the circumstances of individual and social life and all the concerns of public interest, needs not to be said, certainly not to be argued. It is already manifest. The war itself, in a word, will be the basis upon which the distinctive civilization of this people will be founded hereafter, and its effect upon their political and physical condition, great as it may be, will be scarcely greater than upon their intellectual and moral character. Its experiences, recollections, and traditions; the impulses, the energies, the passions, and aspiration it has called into being, will be impressed with controlling force upon every mind, and will inspire the thoughts and sentiments, the literature and the ambition, of the present and future generations with ever-increasing influence. An immense impulse will have been given to the intellectual as well as the physical energies of the people. All the energies of thought and of passion, as well as of action, will have been aroused to their utmost intensity, and with the same intensity they will seek for continued exercise. And as the groundswell after a storm is more dangerous than the storm itself, which controls while it arouses the

deep, so the periods that immediately succeed great wars are often more fraught with peril to a people than war itself. At such times, so critical and so difficult for the statesman and the ruler, there is more than ever need that all the conservative moral forces which influence the character of a people and give stability to social and political institutions shall be held unimpaired and in full activity. All the influences of education, of religion, and of morals become then supremely important. As the passions and the energies of men have become intensified and the demoralizing effects of war been spread abroad through the land, all the constraining and conservative agencies of society must be strengthened in proportion. And as the former are but too surely transmitted in increased intensity to the young, so is it in the minds of the young, ever most susceptible to good or to evil, that they must be met and controlled. For of the mixed good and evil which result from every war, however the former may ultimately preponderate, it is unfortunately the evil that is most immediately felt and most speedily propagated. And if, under such circumstances, we will not educate our children to liberty, that they may be the guardians of free institutions, our institutions themselves must succumb to ignorance and license; for if society may not be protected and liberty preserved by intelligent obedience and enlightened opinion, under mild laws, liberty must give place to anarchy, and then to despotism, which is its only cure. Civil liberty can not long consist with popular ignorance under democratic institutions, least of all in periods of intense excitement or of profound reaction, such as follow after great wars. Of this truth history is full of proofs. In free governments, therefore, such as ours, and especially in times like these, apart from every obligation of duty, the necessity of self-preservation—stronger in political ethics than every other motive—requires that the people of the State, above all others, shall appreciate the importance of education and cherish all its institutions and agencies.

To these agencies of moral as well as intellectual influence, now more than ever important, we must chiefly look, both to resist at once the immediate demoralizing effects upon the young and to meet hereafter the multiplied intellectual and moral wants of the country in its new condition. These wants must be, moreover, now anticipated and provided for, while the elements of demoralization are already so rife, or it may be too late, when—the stress of war removed—they shall be let loose unrestrained upon the country. Almost an entire generation of our young men since the beginning of this war have passed from childhood to manhood, and entered the field of strife in great measure without even the ordinary advantages of intermediate education. This is already a sad condition for themselves and for their country, and it is, therefore, only the more important that this want shall be supplied for those who are to follow after them. The Confederate congress, in their enactments, and our excellent President, in many public expressions, have shown a wise appreciation of the vital importance of this subject to the country. Under circumstances of public peril, calling for the exercise of all the defensive power of the country, and in the midst of a conscription almost universal, those who are legitimately and permanently engaged in the profession of teaching have been left exempt from military duty. This can only have been done from a conviction of the vital and enduring importance to the country of their work, and that they—unfortunately only too limited a number—could best subserve the public defense and the common welfare by keeping alive the institutions and the influences of education, and by training, during this critical period, those who are soon to be charged with the destinies of the country. This consideration imposes upon teachers, on the other hand, a peculiar obligation that they shall take high and patriotic views of the trust thus confided to them, and that in their sphere, not the least important in this respect, they shall realize that they, too, are called to labor, for the establishment of our independence. * * *

Without this, without an independent national culture, there can be no com-

munity of sentiment among the people, no independent literature, no distinct national character; in a word, no true independence and no permanent institutions, for, without these, political independence or military power can rest upon no distinct and enduring basis. Of this truth this war has given us already an impressive proof. To our cost have we realized (when it was almost, yet, thank God, not yet quite too late) to what extent, under the name of equality and liberty, the Delilah of this false Union had already shorn us of our strength. Not only had it well-nigh robbed us of all the elements of political, industrial, commercial independence until it deemed us powerless in its grasp, but with a still more subtle invasion our artful "brethren" of the North had sapped the foundations of our education and our literature by the emissaries of their schools and the publications of their press, and had these influences not been happily arrested they would in the end have undermined our opinions, our politics, our institutions themselves, rendering their dominion complete and revolution for us impossible. How far had this been already done in some States we have abundant and melancholy proofs, and since at this rate revolution or slavery must have come, we have on this account reason to be thankful that revolution came so soon. To carry forward successfully this revolution in their own sphere and to establish this bulwark of independence for our people henceforth is now the peculiar duty of Southern teachers, and how this shall be effected is the great problem of Southern education at the present day. It is a problem that comprehends the profoundest interests and the most momentous and far-reaching results, affecting the welfare and character of our people, and if it is not solved practically now, under the impulses which this war has awakened and while its spirit is yet rife, it may be safely said that it will never be done at all, but that we shall drift back after peace is made into a worse than our former dependence, for it would then be a dependence upon a foreign people and a confession alike of intellectual inability to complete and of moral unworthiness to enjoy that independence which our arms had won.

With your indulgence, I desire to offer some practical views which I deem important in connection with this general subject before passing to the specific object of this communication, upon which, however, they will have a direct bearing.

It has been the misfortune of the South that thus far the profession of teaching, as such, has scarcely been known among us. Except in a few college professorships, many of which are of limited influence, but few educated men of Southern birth have devoted themselves professionally to this pursuit. This has been caused, in part, doubtless, by the character of the Southern people, who have been attracted rather by the more active pursuits of agriculture, or of professional or political ambition, than by the quiet studies of the school. * * * The result has been—apart from other influences most unfriendly to our institutions and pernicious to our youth—that the profession of teaching itself had fallen into disrepute among us. * * * Among our own people teaching has been mostly a temporary occupation, serving only as a stepping stone to some other pursuit that offered higher rewards; and too often it has been the last resort of the incompetent and worthless, who had failed at every other business. Under such circumstances, with such standards in the profession of teaching itself, it is not to be wondered at that our standard of education was low. * * * There have been, of course, exceptions in many worthy and illustrious Southern teachers—I speak of the rule. It is only of late years, and chiefly through the influence of the University of Virginia, whose noblest offspring is the body of earnest teachers which have been sent abroad throughout the South, that our people have begun to awaken with worthier standards from this pernicious error, and to perceive that it is not only important what is taught, but how, by whom, and under what influence and associations. * * * We need an independent, self-sustaining system of education, repre-

sented by our own teachers, sustained by our own institutions; * * * an education simple, earnest, truthful, worthy of the intellect and character of a free and uncorrupted people. How shall this be supplied?

I do not propose to discuss any of the details of this question, however important, but only to indicate some leading points that are pertinent to my present object.

In the first place, and as the groundwork of every other reform, the profession of teaching among us and the character of our teachers is that of mind upon mind, character upon character, in direct and daily contact, aided, on the other hand, by all the impressibility of youth. It is conveyed through innumerable channels beyond the mere agencies of instruction, and for good and evil—if the teacher be not wholly imbecile or repulsive—it will affect the moral as well as the intellectual being of the pupil throughout life. How many there are who can trace their most characteristic habits of thought and of life to the influence of some one or two favorite teachers in early years; how many more in whom such influences, still potent, have been only forgotten by themselves. To bear worthily this high office, and to train our children not only in right knowledge but in right conduct and in those refined sentiments and high principles which are better than all knowledge, we need a body of teachers who shall possess not only talents and learning, but moral qualities and accomplishments, such as shall make them worthy models of character and of manners under the highest standards of life. That we may have these the dignity of the profession of teaching must first be elevated, its influence and importance must be acknowledged, and there must be attached to it such rewards of honor and of emolument as shall offer inducements to the highest order of talents and attainments in the choice of a profession. And in this direction teachers themselves must take the first step for themselves and for the public. Their profession, like every other, will receive no higher estimate than such as they put upon it. Let them, then, begin by adopting for themselves, in the first place, the highest standards of professional attainment and conduct. Let them discard and frown upon whatever is false, superficial, or unworthy in method or presentation. Let them cultivate among themselves the highest sentiments of professional responsibility and professional pride. Let them at the same time set a right value, and a right price also, upon the work of education, remembering themselves and teaching the public to understand that of all cheap things that are bad, cheap education is the worst. They will thus, by mutual influence, elevate the standard of the profession among themselves, and by setting a right value upon their own work they will elevate both it and themselves in the eyes of the public and increase the dignity, the usefulness, and the inducements of their profession. Thus only an enlightened public opinion supporting their efforts, it may be hoped that young men of talents and ambition may be attracted to this pursuit and induced to prepare themselves for it, with elevated standards of attainment, as the profession of their lives.

In the next place—and this is the only other consideration to which I shall advert at present—that such a reform may be made practicable and effective, means must be provided and facilities furnished for the special education of teachers. Teaching is not a mere occupation. It is an art of the highest difficulty and importance, that requires special attainments, as well as the highest faculties, for its exercise. It is one thing to know; quite another thing to teach. The teacher must possess quite a peculiar education, and if it is not given to him by preparation he must give it to himself by experience. *Non repente fit.* No man is at once a competent teacher, and no man will become such, in the higher sense, who does not devote to it continuously his whole time, and strength, and study. There are habits of mind—modes of thinking, of knowing, of imparting—that belong to the teacher and that no man can acquire without special study and experience. This constitutes the great importance and value of professional teachers, men who shall make

teaching the business and study of their lives and find in it their sole emolument and ambition. None others will subject themselves to those severe methods of discipline and study which are required in teaching, none others will submit cheerfully or constantly to its constraints and sacrifices, none others can enjoy that matured and ever-progressive experience which is essential to the best teachers; for the truly good teacher is himself the chief learner, and every year will add not only to the stores of his knowledge, but to his mastery of his art. He is ever acquiring, by his own experience, new views, more striking illustrations, clearer power of expression, simpler and more progressive methods of instruction, and a profounder knowledge not only of all the relations of his subject, but of the laws of the human mind and of the means by which it is to be reached and wrought upon. Let every true teacher say if such has not been his experience. It may be safely said, with few exceptions, that none other than professional teachers are efficient teachers, and that none of those who pursue teaching as a mere pastime or as a preparation for other pursuits will ever attain the highest usefulness as teachers or contribute to advance the standards of the profession. Apart from this, it is of the highest moment to each community that the office of teacher in their midst should be permanently filled by persons of approved experience and ability, and that they shall not be subject, as in general heretofore, to the risk and loss of a perpetual change of schools and school-teachers. A body of professional teachers is indeed scarcely less important than a professional ministry, and a people who fail to provide for the one or the other imperil the highest interests of education and of religion.

And, indeed, it is only through the influence of such a body of educated and professional teachers that any true reform in our system of education can be accomplished. The laws of physical architecture are reversed in the intellectual and moral world, or, rather, the law is the same, but the point of departure is different. Here the foundation is above, and from above all building, all reform, must begin. It is only through the influence of a superior intelligence or of an outward influence higher than itself that the human mind or the human heart can be elevated to a higher nature. It is so in religion, it is so in morals, it is so in intellect, and this is consistent with the doctrines of Revelation, which teaches that all holiness and all intelligence come from God and that man alone can work out no good for himself. All civilization, all progress in the world's history, have come from the influence superior to himself, that shall control and exalt him. Left to himself, he will never become conscious of his intellect, and his moral nature, if indeed it could have any existence, will follow only the promptings of original sin, or, at best; of his merely physical appetites. So in education. If you would elevate the colleges, you must begin with the university, from which they derive their teachers and standards. If you would elevate the academies, you must first raise the colleges, and if you would elevate the schools you must first provide the teachers who shall be competent to teach them upon elevated standards. Of what use are free schools and public schools, even if you would fill them with pupils, without a supply of educated and competent teachers, and how else can we hope to secure these in permanent employment without providing the means for their education in our own institutions? This State has committed the error of attempting to institute schools without providing teachers. From such a system nothing could have been adopted and nothing can ever flow except results the most depreciatory and discouraging to the interests of education among the people. The money that has been spent in vain in Virginia in the institution of free schools, if employed in the education of teachers, would in a few years revolutionize the system of education in the State, rendering free schools first useful and then soon unnecessary; for the influence of a truly able teacher in any community is to make education first appreciated and then voluntarily sought by all around him. Not in the schools alone thus directly supplied with teachers would the influence

of such teachers be felt with reforming power, but in all the institutions above them. From the primary schools the pupils would go with proper preparation to the academies, and these would no longer need to do the offices of the school, nor the college those of the academy, nor the university those of them all, as, from want of proper preparation below, has been the case heretofore; but each grade of institutions, alike supplied with teachers suitable for its own wants, could do its own work in its own sphere, and within that sphere reach the highest degree of efficiency. Thus mutually related and each depending upon the other, the various grades of institutions would grow together into a compact system of education, not, as now, each for itself endeavoring to do the work of all and all imperfectly.

The importance of this subject is fully understood and exemplified in those countries which have accomplished the highest results in education and in the general diffusion of knowledge. The whole of the compact and wonderfully perfected system of education in Prussia is founded upon its normal schools, and similar institutions exist in other countries of Europe, being regarded everywhere as the basis of the whole system of education. These schools, which are under the peculiar care of the Government, are designed especially for the education of teachers upon standards adapted to the wants of the various grades of schools, and from them are appointed the teachers for all, according to their several requirements. Thus from these schools, by the teachers which they send forth, are derived the standards, the methods, the text-books of instruction, throughout all the schools of the country, which are thus adapted in their several grades and relations to a uniform and compact system, embracing the whole range of education from the primary school to the university. They are therefore called normal schools because they are normal to all others, determining the norms or standards by which all are conducted. Upon them is founded the whole system of education. The utmost care of the Government is devoted to them. Whatever improvement is effected in them is extended through all the schools, and their influence in advancing the interests of education is acknowledged throughout Europe as supreme. In a Government such as ours, where the State can not exert that direct control over the system and parts of education which is possible in monarchical countries, it is, as it seems to me, only the more important that it shall avail itself of those indirect means which, while not inconsistent with the voluntary principles of free government, shall tend to produce these desirable and systematic results. There is but one way practicable to reach these ends, and that is by the education of teachers adapted to the wants of our schools. This reform is fundamental to every other in the cause of education. For want of it all the endowments of the State and all the endowments of benevolence in behalf of education, however extensive, will languish and fail; for it is at last only through good teachers that good teaching can be had, and without good teaching no system of education can be effectual. The same liberty which is now manifesting itself in so encouraging a manner in the most enlarged enterprises for the extension of education to the needy and bereaved of our country should consider this object, without which all such efforts, however well conceived, must be, in a great measure, ineffectual. The results that have been accomplished in a few years in this direction by the University of Virginia, both directly and through its influence upon other institutions, and that, too, without special profession of this design, but only by its methods of elevated and exact instruction, show clearly what might be accomplished in our State and country by an institution, or a system of institutions, especially adapted to the education of teachers according to the wants of our schools. And with this example before us, and as the university passes on, let us hope, henceforth to its own special and wider calling, I can not but express the hope that the State itself will supply this fundamental want in

our system of education, and that at no distant day, and from some influential source, the attention of the legislature may be called to the subject.

These considerations have, in all their weight, a peculiar application to female education, with which we are at present most immediately concerned. Whatever arguments may be directed to the improvement of education, apply with all the more strength to the education of woman. This much-flattered and much-abused sex is in no one thing, perhaps, so much flattered and so much abused as in her education, in the common understanding of the term. If it be possible to speak comparatively of things so immeasurable, I should say that the education of this sex is of still more importance than that of the other, and that because, in the first place, they are so much more susceptible of the influence of education; and because, in the next, their individual influence is so much greater on the intellectual and moral tone of society. Certainly, however, reform and improvement are here much more needed, because so little of worthy effort has yet been made in this direction. Female education, indeed, as too often conceived and practiced (especially under the influence of Northern models) is at once a shallow pretension and a gross outrage, and for all those who value the character and influence of woman in wife, in daughter, or in any of the relations of society, it is a consummation devoutly to be wished that profounder ideas and worthier standards should be adopted on this subject. I am happy to know, however, that in Virginia, at least, we have some schools not unworthy even of Virginia daughters. And if I might, without being drawn into the subject, say one word in passing upon it, I should say that the characteristics chiefly to be desired in female education are two—which the term implies. First, that it shall be education; and, secondly, that it shall be feminine; that it shall be thorough for the training of her mind, but not masculine, for the perversion of her character. It should be based upon the idea that woman is woman, and not man nor a butterfly—man's helpmeet and companion, but neither his plaything nor his rival—whose highest destiny is to be wife and mother, and to bear throughout life wherever she moves, in the household and in society, the enchantment and the sanctities of woman's influence as mother, sister, wife, and friend. Her education in all its modes and circumstances should be founded upon this conception of her distinctive nature and calling in life, and adapted to this destiny. And, therefore, while it should cultivate with equal care the intellect and the manners by the loftiest standards, it should shun alike the false flattery of merely superficial accomplishments, which will degrade her in intellect and usefulness, and that other extreme of intellectual pride and masculine independence, which would unsex her, aiming, in one word, to educate neither belles nor bluestockings, but women for woman's sphere.

But this branch of the subject has, under our present circumstances, an importance that can hardly be expressed. During the period of this war the higher education of young men has been almost entirely suspended, and the boys that are coming after them are suffering scarcely less of intellectual loss and of the demoralization which the war has brought with it. There will then pass into the arena of life and into the control of our future destinies almost an entire generation of men without even the ordinary advantages of education. To what source, then, can we look for the moral and intellectual support of our society in future than to the influence of educated women, the sisters, the wives, and the mothers of the next generation? To what other source can we look for the refining, constraining, exalting influence of true culture upon the men than to them? For they ever set the tone of the household and of society, and in all the departments of life their influence is omnipotent. When we educate our daughters to-day we educate our sons who are in the army and their children; we educate the homes, the society, the moral and intellectual character of the generation that is now passing into manhood—we shape the sentiments, the principles, the standards of manners and of honor which shall govern them; and, under the present circumstances, this

agency is the more important because now it is almost the only means by which we can reach these objects. The responsibilities of the women of the South will be greater than heretofore and ever perhaps hereafter. They will occupy a larger space, not only in relative numbers, but in relative influence, in society, and their intellectual and moral culture will exert a profounder influence upon the character and destiny of the country. It is well that they should understand this. It is well, above all, that those who, at home or in schools, are engaged in their training should realize it. And while our male institutions of education are, for the most part, of necessity closed, our female schools should be cherished with the more care and conducted with the more vigor.

These considerations, the weight of which scarcely anyone will deny, give now a peculiar importance to the education of female teachers in our country. All that has been said in regard to the education of teachers in general applies with equal force at all times to this branch of the subject, and the present and future condition of our country in consequence of the war gives to it now an unequalled importance. Not only will the numerical relation between the sexes have been greatly disturbed by the war, but, in consequence of the impulse which it will have given to physical enterprise and military ambition, many of the ordinary functions of society formerly performed by men must hereafter, for a time at least, be filled by women, and this enlargement of the sphere of employment for women will be found to be not the least among the reflex benefits of the war. Among these functions may be reckoned, in increased degree, that of teaching, which will offer at first but few attractions to intellectual young men in comparison with more active and profitable pursuits. It therefore becomes the more important that the means for the competent education of women for this office should be provided, and on such basis as, while offering needful facilities for all who are worthy, shall encourage the most refined and gifted young ladies to enter this profession. For it must ever be remembered that it is not knowledge and intellectual competency alone that are requisite in the teacher, but refinement of manners also, and elevated moral influence; and these are the more indispensable in the female teacher, because so essential to her character and influence as a woman and because the culture of the manners and of the moral sentiments holds relatively a so much more important place in female education.

But there is besides, in the nature of things, the more need that the number of competent female teachers shall be multiplied, because they are actually in so much greater numbers, especially for the education of children of their own sex. Whatever may be the truth of the matter, whether or not there are evils inseparable from boarding schools which no prudence can remove, it is nevertheless true that there exists in the minds of many of the people of Virginia a deep-seated prejudice against boarding schools for girls; and it must be admitted that this aversion is not without foundation as regards the earlier education. It is certainly in the highest degree desirable that in the place of boarding and even neighborhood schools shall be substituted for young girls, and even for small boys, domestic education, beneath the influence of the parental eye and amid the sanctities of home; and the education of competent female teachers for our own homes can alone supply this want, and contribute, without surrendering the higher education of our daughters, to render boarding schools unnecessary.

To supply this want for our Southern homes facilities and encouragements for the education of female teachers in sufficient numbers must be furnished. Up to this time, for want of such provision, our people have been compelled for the most part either to send their daughters at a premature age to boarding or other public schools or to import female teachers from abroad. * * * These we should endeavor to supplant, and to supply this want for our families by educating our own young girls to this office—daughters of the South, reared in the midst of Southern society, with the purity, the delicacy, the good sense of Southern women, fit

to enter our homes in congenial companionship, and there to educate our daughters at once in the discipline of sound knowledge and by the example of a refined and elevated womanhood. What measure can we place to the influence of such a class of educated Southern women teaching in our homes? What a blessing it would be to our families, to our society, if such a system of domestic education could be rendered widely available for our daughters and our little boys, and what a beneficial and patriotic work would the preparation of such teachers be for our common country on the part of those who might be called to this high office. He who sends forth into life a single refined and educated woman sets a star in the firmament of society; but he who sends forth a refined and educated teacher sets indeed a sun in the heavens, whose rays of intelligence and influence shall lighten all beneath her sway. And great as is the influence of the male teacher, through both intellect and character, that of the female teacher is still greater, for she is by nature the bearer of a mightier individual influence, of attraction or of repulsion, and she employs this influence chiefly over those earlier years of life that are most susceptible and upon that sex which is at once the most sensitive recipient and the most powerful reflector of every ray.

But to effect this object in anything like an adequate degree, organized effort on an enlarged and permanent plan is necessary—difficult, and even impossible under present circumstances, as such an undertaking might appear. * * * The times, indeed, look dark around and before us; but believe me, never before has there been in this country a time so favorable for the inception of great undertakings as now. This is an age of mighty activity—of wondrous thought—of new and teeming ideas. It will soon be an age of mighty progress. Bold conceptions, that years ago would have languished and failed, now caught in the stirring whirl of the popular heart, will soon be borne upon the mighty returning waves of our progress to realization and success. And though material difficulties may intervene and complete success for a time be impossible, yet seeds sown now in the eager and earnest minds of our people will take deeper root and bear surer fruit than if postponed to a later day, when once more purely material enterprises shall absorb their attention. And this is particularly true with regard to objects like that here contemplated. All the energies of the people are now concentrated upon the one object of securing their independence, and whatever will contribute in any way to confirm and perpetuate that independence will awaken an interest and a support on the part of the people which they would never hereafter accord to any object upon its own merits alone. Now is the time for every movement in that direction, while the heart is all alive with this absorbing purpose. And, as I have before remarked, if the foundations that are to secure our intellectual and moral independence of the North be not laid now, under the impulses of this revolution, they will probably never be laid at all, and that independence never won.

But for the inauguration of the enterprise now under consideration, the present time is, from other considerations, in a peculiar degree opportune. This war has impoverished hundreds of families in the South, whose daughters will remain dependent after the war upon their own exertions for support. It has made thousands of orphans, whose fathers or brothers, fallen upon the field of battle, have bequeathed them to their country. Among these will be found many of the highest intelligence, worthy of the most liberal education and capable of the highest usefulness as teachers, if the means of training were afforded them. There are many of the daughters of the most educated families, born to wealth and reared under associations of the most refinement, now impoverished and dependent, who would gladly spend their last remains of fortune in fitting themselves for the honorable office of teachers. It is a happy omen for our future that such young ladies are already preparing themselves for this work. I speak from experience when I say that there have been such at this institute, who will compare favorably in every particular with the daughters of any gentleman in the

land; and were the opportunity more liberally afforded, their numbers would, as we know from almost daily application, be largely increased. Not only, then, would such an enterprise at this time, be sure at once of an ample field and of abundant material, but the very position and influence of pupils such as these would give to it at once, as well as through their profession hereafter, a dignity and an influence in the public estimation, which otherwise, considering our former circumstances and habits in this regard, years of effort might not attain. The time, the need, and the promise of success and usefulness alike invite our people to the consideration of such an effort at this time.

And yet no small difficulties, even under the favorable circumstances, would attend the undertaking. An institution fulfilling these objects should be conducted upon the most elevated, and, at the same time, the most extended basis, such as would not only afford the most thorough and ample instruction in the higher branches of education, but provide equally for the more elementary instruction in branches requisite for the ordinary teacher, with standards of attainment and graduation adapted to the different wants of different families and grades of schools. Thus, at once the most able and the most ample faculty would be necessary and an equipment in other respects equal to all the purposes of extended and thorough instruction. Such a school, in order really to fulfill its mission, should not be normal merely in name, but it should be conducted throughout upon the standards of the most refined and elevated society. Its instructions, its discipline, its associations, should be adapted to the education not only of the intellect, but of the character and manners; not only in peculiar degree to the training of such habits and exercises as are especially necessary to the teacher and governess, but to the culture of those graces of mind and character which adorn the truly educated woman, remembering that it is through these at last that her influence as a teacher will be chiefly felt; and that as, on the one hand, only an educated mind and refined taste can confer true accomplishment of manner, so, on the other, it is only the truly refined and elevated woman that can make an attractive and worthy teacher. While, therefore, on the one hand, these requisites would demand a large outlay of money and an ample income, on the other hand, that the practical objects of such an institution might not be defeated, its prices should be within the reach of persons of moderate fortunes; and that its fullest usefulness might be attained, it must be, to some extent at least, beneficiary. It may be safely said, therefore, that such an institution can never be successfully based upon private enterprise, nor could any private or temporary school, however successful, fulfill the desired requisites. It must be public and permanent in its nature, and it must be supported by ample donations from the public as an institution and free from the objections that are usually applied against such measures. It can not be hoped under the present circumstances that, in view of the prejudices that have governed the policy of our legislature, it would be willing to second measures already instituted. But I can not doubt that if this subject were properly presented and its importance duly realized, there would be found numbers of patriotic and intelligent men willing to unite in its support, and the public interest thus excited might perhaps induce the State to place the enterprise upon an enduring public foundation, or, better still, to establish institutions of its own for the education of both sexes. But that such a movement may be successfully inaugurated it must first be made from some responsible source, and with an earnestness and an ability that shall give to the public a guaranty of both fidelity and success.

It is to the noble office of taking the first step in this great work, so needed for our country and so appropriate to the time, that I would urge the authorities of Hollins Institute.

This institution, from its position and advantages, is peculiarly qualified, and I believe, if these considerations are just, called upon to inaugurate this movement.

Its long establishment, its success and reputation, and the known character of its trustees and faculty, would be a pledge at once of fidelity and of ability that would secure the confidence and support of the public; and while, from the condition of the country, it is debarred from its full operation in the ordinary channels, it might, with the more facility, undertake such internal changes as would be required, and happily in its case these would be slight. Having been originally adapted to this very object, it is already known for the thoroughness and completeness of its instruction and for the high attainments of its graduates, many of whom have been most successful teachers. It possesses a faculty (this I may say disinterestedly, for I am but a sojourner here) unsurpassed in ability and experience by that of any college, male or female, in this State, and more ample in numbers, I believe, than has ever been possessed by any female school in the South. Its buildings, its improvements, and its apparatus of instruction have already been brought to a high degree of development, and its methods and standards of instruction and examination are already established upon the highest basis. It is, indeed, an institution which, considering all the circumstances, is an honor to those who have founded and to those who conducted it, and which, if I rightly estimate its capacity and its destiny, is called to a high function hereafter in the education of Southern women. I propose that it shall now advance to meet this destiny by taking the first step toward an organized effort for the education of Southern female teachers upon a basis of public beneficence.

Let it be understood, however, that it is not proposed, in making this suggestion, to introduce any changes into the constitution or conduct of the school that would impair its general usefulness or change its relations in any respect. Whatever might be desirable to complete the idea of a normal school, adequate to the wants of our people, or whatever we might be able ultimately to effect, in this direction by the force of a successful example, it is not proposed in this instance to aim at any results not reasonably practicable within the scope of our institution, such as it now is. For, indeed, it is only thus, by practical success in however limited degree, that we can hope, by influence and example, to effect the good at which we aim. It is not proposed, therefore, to change the character of the instruction or of the patronage of the school in any degree, but simply to combine with its usual operations the special and beneficiary education of teachers, in practicable extent, as a recognized and permanent feature in its constitution. It is believed that the happiest results would flow from this combination upon proper principles, and that so far from suffering injury, the reputation and success of the school would be increased thereby in every direction. An institution known to be adapted to the education of teachers, according to the highest standards of instruction, would be sure to attract a large measure of the most select private patronage on the part of those who, without designing their daughters for teachers, would yet desire for them a like solid and thorough education; and the teachers themselves, thus sent forth, would constantly return to the school. I believe that such an enterprise, with all its rewards of honor and usefulness, is now practicable, with full assurance of success.

I do not propose to discuss the details of any plan for the object. This will naturally be a subject for the deliberation of the trustees and faculty, should the proposition itself meet with favor. I will merely sketch the general principles of such a system as seems to me to be practicable.

In the first place, I will remark that the experiment as here conceived, even should it be only an experiment, can cost nothing and lose nothing to the school. The very idea of such an enterprise implies that it shall be based upon a pecuniary foundation ample to support its expenses. Any attempt at beneficiary education upon any other basis would result practically in charging the other patronage of the school with the expenses of this education. And it is believed, further, that the example of public benefits conferred without corresponding sacrifice is injuri-

ous both to the recipient and to the public. It is only by appealing to public support that the public interest can be actively enlisted, and only by attaching value to the privilege can we make the privilege itself appreciated. The school itself, therefore, can not and ought not to undertake anything in this direction except upon an assured foundation of public pecuniary support. The first step, therefore, will be, after digesting such a plan as may seem practicable, to secure this foundation in advance. It is proposed, then, to go at once before the people by publication, by efficient agency, and through the public press, setting forth the plan proposed; to impress upon the people the importance of the movement; to explain its workings and its results; and to endeavor to secure contributions upon which the enterprise may be practically founded. Such publication should also set forth the actual character and condition of the school, as a pledge of its ability to redeem its promises. I do not doubt that if the idea in all its bearings were properly represented before the public, and if the people were made to appreciate the profound and far-reaching results of such a system, successfully realized, the means could be obtained, and that many who would not contribute to the ordinary objects of a school and many others beyond the more special sphere of the influence of this institute would, from patriotic considerations, contribute to an object such as this. A foundation once begun, and the public mind interested in the idea, the movement would gather progressively strength and influence in still wider circles. It is the first step only that costs, and, as in all important enterprises, the first step, once firmly taken, will secure the footing. The very example of such an effort, even if not successful, would redound to the reputation and influence of the school, and if successful it would inaugurate a new era in southern female education and accomplish results of usefulness to the country and of honor to the school that can not be estimated.

It is proposed, therefore, that we announce to the public our purpose to make arrangements in this school, conditioned upon the means being obtained for the permanent education, annually, of a certain number of young ladies of Virginia, free of rent and tuition, for the profession of teaching; and that this arrangement shall go into effect on the 1st of January next, or as soon thereafter as means can be secured to justify the undertaking, the money subscribed to be due only when the arrangement is actually begun; the outlines of the plan to be somewhat as follows: The funds obtained for this purpose shall constitute a permanent endowment for the general purposes of the school, the interest upon which shall be annually devoted to the payment of the tuition of these beneficiary pupils. The pupils shall be selected, from the number of applicants, by the trustees and faculty, or by a committee appointed for the purpose, upon such plan as may be agreed, without regard to denominational or other peculiarities, but solely according to certificate of intelligence, character and fitness for the office and influence of teachers, a reasonable degree of previous preparation, and a reasonable standard of age being required in each case. Preference shall be given for a reasonable period, say, for ten years, other things being equal, to the daughters of those who have been killed in battle, or become reduced by patriotic sacrifices, during this war of independence. It shall, however, be distinctly understood that this provision is not made for the education of the indigent, but rather of those who, by nature and qualifications, shall be deemed most capable of future usefulness as teachers, and who by their own influence, both as pupils of the school and as teachers afterwards, can best subserve the ends of the benevolence which they enjoy. For this reason the benefit proposed shall embrace only the tuition and privileges of the school—and that on conditions to be mentioned—not the board, text-books, or personal expenses in any degree. The system shall be beneficiary, not eleemosynary, and shall be limited to those who are either able to bear their own expenses, and willing to make the sacrifice, or who, from promise of usefulness, shall be able to secure to this extent the interest of others in their behalf. It is only thus that their

proper relations and associations in the school could be secured without offense to others, and only thus, too, by selecting persons of proper standing and of proper merit, capable of enjoying and appreciating the highest standards of instruction and of association, that the benefits of the system itself could be extended through the highest and the widest circle of influence. And it may be safely affirmed that while the applicants for this benefit would embrace only persons capable of appreciating the value of these requisites, they would exert the best influence in the school and the highest usefulness in life. Every such pupil should be entitled to a full course of three years' instruction, but not more, except in extraordinary cases; but the more fully to guard against the results of mistaken choice, and to sustain the highest standards of improvement, the election should, in each case, be repeated every year.

On receiving their election, the parties should be required to enter into bond, by their legal representative, with good security, to spend at least three years * * * in teaching, within the Confederate States, the condition being that in the event of the forfeiture of the bond the party should pay to the institute the full sum of the tuition received, with interest from the time it was due, which sum should then accrue to the funds devoted to this general object; and certificates of the fulfillment of this bond should be required to be returned to the superintendent of the institute. Dismissal from the institute, or the withdrawal of this privilege from incompetency or any other cause, should likewise render the party liable for the tuition, but should release from any further obligation. As part of the training of these pupils for the office of teaching, they should be required, during the last year of their studies, to take part as assistant teachers, under the supervision of the faculty, in the instructions of the institute; and their diploma should set forth this fact, and certify, besides their attainments in knowledge, their competency in teaching, as thus ascertained. This requirement, while of important advantage to themselves as future teachers, would constitute an incidental benefit to the institution of no small value, in multiplying its means of instruction according to its own systems. In conferring diplomas of graduation, or other certificates, grades should be adopted, in the case of these pupils, according to the different requirements of teachers in different grades of schools, of which I would suggest two: The classical or academical, embracing Latin and French, and the English, embracing only the studies of the English departments; the degree of attainment in music might constitute a third. These grades should represent only the difference in the subjects or extent of attainment, thoroughness of discipline and a high degree of sound knowledge being required alike in every case, as of all other graduates, in any department of the school. Beyond this, as to the methods of instruction and examination, and the rules of conduct and discipline, no distinction should be made between them and other pupils. Whatever improvements might be required for their benefit should be common to all; whatever advantages might be enjoyed by others should belong to them also. According to the standards here conceived, whatever accomplishments of intellect or of manners are appropriate to the most refined and select society are also appropriate for those who shall be the teachers of the daughters of our State, and whatever thoroughness of instruction and of discipline is required for these is surely desirable for all. In every respect, so far as possible, this system should be made a part of the general operations of the institute and these pupils identified in education, association, and sympathy with the rest of the school. The highest benefits would thus result to all. In this school, with its existing modes of discipline and conduct, no difficulty would attend this union; and its known standards of instruction already guarantee the most material requisite of success in every other respect.

The extent to which this undertaking could be realized would depend, of course, upon the means obtained. It might indeed be begun with any number, however

limited; and such a beginning would probably do more than anything else to insure the full success of the enterprise. It is proposed, however, that the announcement be made for 20 pupils, and the effort continued until the means are obtained for the education of such a number, it being understood that the number shall be limited always by the interest of the funds secured. An annual interest of \$2,000 would pay for the tuition of this number of pupils at \$100 each, in old money, and while the school need only be charged yearly with the interest, in the form of such instruction, the principal, or any portion thereof, might be legitimately devoted to the general improvement of the school, which would be indeed its best investment. The character and number of the trustees would be an ample pledge to the public that the funds would be faithfully applied. Could we attain even this number, while we might even go beyond it, there would be left an ample margin for private patronage; while the school would thus, in a few years, accomplish an amount of good in the education of the daughters of our people that is incalculable.

With these remarks, I venture to urge this subject upon the consideration of the trustees of Hollins Institute. The time is ripe, the need is great, the means are ready, as I believe, for the undertaking. I regard it as a great and patriotic enterprise, whereby, if they should succeed, they will not only elevate the character and reputation of the institute itself, but will entitle themselves, also, to the gratitude and praise of the country for inaugurating an enterprise of such wide and lasting usefulness. I believe that they will meet with undoubted success, that the idea will be seized and their example followed elsewhere for both male and female schools, and that they will find it to be no small honor to have been the founders of the first normal school in the Confederate States. I sincerely hope that this honor and this usefulness may belong to them and to the Hollins Institute and Normal School of Virginia.

I am, sir, very respectfully, your obedient servant,

EDWARD S. JOYNES,
*Professor in William and Mary College and
 Acting Professor in Hollins Institute.*

HOLLINS INSTITUTE,
Botetourt Springs, Va., August 20, 1864.

ACTION OF THE TRUSTEES.

At a meeting of the board of trustees of Hollins Institute, held on the 22d of August, 1864 (the preceding letter having been laid before the board by the president), the following resolutions were adopted, viz:

Resolved, That the trustees of Hollins Institute cordially approve the views and recommendations embraced in the letter of Prof. Edward S. Joynes to the president of the faculty, and that the trustees adopt the same as a basis of action.

Resolved, That a committee be appointed, to act in connection with a committee of the faculty, to mature a plan in furtherance of these views and objects.

Resolved, That this plan when adopted shall be communicated to the public through such means as the committee may devise, embracing also the publication of the letter of Professor Joynes, with these proceedings, and the employment of an efficient agency or agencies to advance the object.

Resolved, That as soon as a basis is obtained for the education of five pupils on the principles thus adopted, the system shall be put into operation, announcement being made at least two months in advance.

Resolved, That the pupils chosen under this plan shall be selected from the State of Virginia, without regard to denominational or other peculiarities, but with the sole reference to their capacities for usefulness as teachers.

ACTION OF JOINT COMMITTEE.

In pursuance of the above resolutions of the board of trustees, the president of the board and the superintendent of the institute having been requested to act as chairmen of the respective committees of the trustees and the faculty, the committees met on the 5th of September and agreed upon the following action:

Resolved, That deeply impressed with the importance of an independent and self-sustaining system of education as essential to the independence of our country and the perpetuity of our institutions, and believing that the education of Southern female teachers for the schools and homes of the South constitutes one of the first and most important steps toward the attainment of this end, which now deserves peculiar and immediate consideration; we, in behalf of the trustees and faculty of Hollins Institute, agree to adopt the following plan, and appeal to the patriotism and benevolence of our fellow-citizens in its support.

I. It is proposed that there shall be founded an endowment by public beneficence, the interest of which shall be devoted perpetually to the education of Southern female teachers in this institute.

II. These teachers shall be educated free of charge for tuition or rent, but paying their own board; and shall be entitled otherwise as pupils of the institute to all the advantages and privileges of the school, on the same footing with other pupils.

III. The said pupils shall be appointed annually from the State of Virginia by the faculty and trustees of the institute or by committees appointed for the purpose; but the same person may be appointed in successive years until her course of studies shall be completed, yet not exceeding three years, unless by a unanimous vote.

IV. These pupils shall be chosen at stated times after public notice in advance of at least one month in not less than three of the leading newspapers of Virginia. The applications shall be considered without any peculiarities in regard to religious belief or personal or political connection, but solely with reference to intelligence, character, and fitness for usefulness and influence in teaching. These qualifications shall be required to be satisfactorily attested, and a due degree of previous preparation, as well as a suitable age (not less than 14 years), shall also be held to be requisite for appointment.

V. These requisites being fulfilled and other things being equal, the preference shall be given in making these appointments to the daughters or orphans of soldiers of the Confederate army or to others who may have become impoverished in consequence of patriotic sacrifices during the present war of independence. But as this benefit is designed to be in its results a public and not a personal one, indigence alone will not be considered a recommendation for appointment.

VI. Every such pupil on receiving her appointment shall, by her legal representative, enter into bond, with acceptable security, to spend at least three years of the next five after leaving the institute in teaching in some one of the Confederate States, and binding herself, in case of the forfeiture of the bond, to pay to the institute the full sum of the tuition received, with interest from the time it was due, which sum shall then accrue to the funds devoted to this object, and be invested on the same principles. But if, by act of the faculty, the pupil shall be removed from the institute, or her appointment withdrawn, or in case of her death or any involuntary disability, the bond shall be considered discharged. Certificates of the fulfillment of this bond shall be returned to the superintendent of the institute and shall be filed by him.

VII. The said pupils shall be permitted and required to teach, as a part of the institute during the last year of their studies, provided that this requirement shall be held subsidiary to their own improvement, and shall not exceed one hour per day without the consent of the pupil.

VIII. This foundation shall be known as the Normal Department of Hollins Institute. It shall embrace two courses of study, adapted to the wants of the different grades of schools, namely, the English, embracing a full course of studies in the English department, including mathematics, and the classical, which shall embrace, besides, the Latin and French languages; but the pupils in this department shall also have the privilege, with the consent of the faculty, of studying other subjects in the literary departments when not inconsistent with the specific objects of this endowment. On completing either of these courses, on such standards as may be fixed by the faculty, these students shall receive appropriate diplomas declaring them to be graduates in this department, and qualified as teachers accordingly. And those who may fail to complete the whole of the said course or courses may, upon application and examination, receive from the faculty certificates of their qualifications as teachers in particular subjects. Other pupils, also,

who propose to become teachers, may enter themselves as members of this department and secure the like diplomas or certificates upon the same terms.

IX. This department shall be in all respects an integral part of the institute. Its pupils shall receive the same instructions and the same examinations as other pupils in the same classes, and upon the same standards of elevated and thorough scholarship which are adopted throughout the institute. And in conduct, discipline, and association, as well as in all the other obligations and privileges of the school, these pupils shall be on the same footing precisely as all others.

X. That the benefits of this endowment may be made perpetual, the number of such pupils must be limited by the amount of the annual interest upon the funds subscribed. As an additional pledge, however, of our desire to extend this benefit to the widest possible degree consistent with the maintenance of the institute, it is provided that the tuition of said pupils shall always be reckoned at 25 per cent less per annum than the regular charges for other pupils; or, in other words, the number of such pupils received shall be 25 per cent, being donated annually by the institute to this object. And the entire amount of the interest accruing at 6 per cent shall be regularly thus employed.

XI. In order, however, still further to limit, on a permanent principle, the charge for tuition in the case of these pupils, it is provided that the paid charge shall never at any time exceed one-half the price of board as then fixed by the trustees of the institute. The present value of each of these scholarships, which shall be known as the normal scholarships in Hollins Institute, is for the present fixed, however, at \$4,000 in the present currency of the Confederate States. Any one or two persons subscribing this amount shall have during life the right to nominate one such pupil in such manner consistent with these regulations as may be hereafter prescribed, and the scholarship in question shall be known perpetually by the name of the founder or founders.

XII. This system shall be put into operation as soon as an amount shall have been subscribed sufficient to establish one such scholarship. The funds shall not be due until notice has been given to that effect, and all moneys previously collected shall be returned if at the end of twelve months the enterprise shall not have been to this extent successful.

XIII. The superintendent is authorized and required to employ, with the concurrence of the faculty, efficient agencies to bring this subject before the public, and to solicit subscriptions on this behalf. The president of the board of trustees shall be the treasurer of the fund so collected, and the investment and expenditure thereof shall be under the control of the trustees, whose names, number, and character are offered as a guaranty of the good faith of its employment.

XIV. This enterprise is undertaken as a public benefit, under a profound sense of the importance to our country of affording enlarged opportunities for the education of female teachers in the South, and in the hope that the example, if successful, may be followed by other institutions.

XV. The position of this institute, for nearly twenty years successfully conducted with the amplest patronage and upon the most elevated basis, constitutes, it is hoped, both a vindication of the motives of the enterprise and a sufficient pledge that this trust, if confided to it, will be executed with both fidelity and ability in the selection and education of pupils under the highest standards of scholarship and discipline for all the requirements of teachers in the schools and families of the South. The instructions of the institute being already adapted to this object as an original feature in its constitution, we may the more confidently appeal to the support of the public in behalf of the present plan.

GEO. P. TAYLOR, *President*,
J. P. CORRAN,
RUFUS PITZER,

Committee on the Part of the Trustees.

CH. L. COCKE, *Superintendent*,
L. W. SEELEY,
W. H. PLEASANTS,

Committee on the Part of the Faculty.

HOLLINS INSTITUTE,
Botetourt Springs, Va., September 5, 1864.

CHAPTER XIII.

EDUCATION IN THE SOUTH.

ADDRESSES DELIVERED AT THE TENTH ANNUAL MEETING OF THE SOUTHERN EDUCATIONAL ASSOCIATION, HELD AT RICHMOND, VA., DECEMBER 27-29, 1900.

CONTENTS.—Industrial education and the New South, by George T. Winston.—Education and production, by Charles W. Dabney.—Negro education in the South, by Paul B. Barringer.—Reply, by Julius Dreher.—Discussion, by H. B. Frissell.—Reply, by Paul B. Barringer.

INDUSTRIAL EDUCATION AND THE NEW SOUTH.

By GEORGE T. WINSTON,

President of the North Carolina College of Agriculture and Mechanic Arts.

The two great forces of modern life are education and machinery. The one elevates man, the other subdues nature. Together they develop civilization and determine the destiny of nations and races. How far removed is the American Indian in bark canoe from the modern engineer in iron steamship! Stretch canoe and Indian in endless chain around the globe, each within call of the next, multiply them by 100,000, and the sum of their power will not equal that of a single trans-Atlantic steamer. * * * The little Commonwealth of Massachusetts, with its machinery for education and its education for machinery, is more potent in the life of the world than the whole continent of South America. The cotton crop produced this year by the Southern States could not have been grown, housed, picked, spun, and woven a century ago by the entire population of the globe.

The greatest industrial changes ever wrought within a lifetime have been witnessed by the generation now living in the South. For more than a hundred years we maintained an industrial system in opposition to the industrial forces of the world. The long and bitter struggle between North and South, although waged apparently in courts of justice and halls of Congress, in pulpits and drawing-rooms, on deck of ship and field of battle, was not political, nor legal, nor social, nor military, but educational and industrial. It was a struggle between the educated Yankee mechanic, astride the steam engine, and the educated Southern planter, carrying on his shoulders the negro slave. The heroism of that struggle, the courage, the fortitude, the skill, the energy, and the power with which the South maintained it in peace and in war, are emphasized, beautified, and almost glorified into martyrdom by the absolute certainty, the preordained necessity of its total failure. There was no need of Gettysburg or Appomattox. The contest had already been settled by the mills and factories, the railways and steamships, the power looms and spinning jennies, the reapers, binders, threshers, and other machinery of a people leading the world in mechanical invention, in use of machinery, in industrial progress, and in public education. Had the South possessed resources of skilled and educated labor, of shops and factories, of mills and furnaces, of ships and locomotives, of accumulated wealth such as the North possessed, had the victory been possible by endurance and fortitude, by courage and heroism alone, the boys in gray, under Lee and Jackson, would have been invincible, not only by the North but by the world.

The building up of the South since her overthrow in war, the revival of old industries and the establishment of new, the accumulation of wealth, and the multiplication of schools, colleges, and universities are the admiration and the wonder of the world. But there is nothing wonderful about it. The people who were great with slavery and unskilled labor have become greater with freedom and education. The apparent emancipation of the negro slave was the real emancipation of the Southern white. By Lincoln's proclamation the South was freed from slavery, and the road was cleared to educated labor and industrial development. We realize at last that slavery was not our riches, but our greatest poverty. We dare not picture the condition of the South to-day, with slavery dominant, controlling her industries, and repressing her development.

The South is now in touch with the world. She is educating her own children and the children of her recent slaves. Through the aid of machinery she is converting into wealth her large and varied resources. The roll call of her slaves will never be heard from Banker Hill monument, but the whirr of her spindles and the click of her looms is already heard in Lowell and Manchester. She is shipping iron to Birmingham, coal to Newcastle, calico to Calcutta, and tobacco to Turkey. Cotton is still king, but his throne is no longer in the field. He rules in the mill and hears the music of machinery instead of the song of slaves.

But the development of the South is only begun. We are traveling in the right direction, but we have not traveled far. We must quicken our pace or we shall fall behind in the world's industrial race. As yet our products are chiefly raw material, or coarse and cheap fabrics. We are winning our way by cheap products, cheap labor, and long hours of work; but the day may come when cheaper labor and cheaper products and longer hours elsewhere will drive us from the field. Cheap labor is abundant in South America, and in Asia is practically unlimited in supply. The safety of the South is in better labor and better products.

The labor unit of the South is still the negro, emancipated, but ignorant, unambitious, and less trained than when a slave. In his present condition he renders difficult, if not impossible, the changes requisite to intensive and diversified agriculture and retards the development of all industries in which he is employed. As a race he is less skilled than during slavery. The industrial development of the South demands that the negro be either improved or gotten rid of.

The problem is not political, but purely industrial. With the South it is one of development; with the negro, of existence. It must be solved, and solved aright. The mistakes of reconstruction must be corrected. The North and the South, government and philanthropy, education and religion, all forces, domestic, social, and industrial, must combine to make the negro a better workman. The real race struggle is for existence, and the negro is ill prepared to win it. Dragged from barbarism to civilization, educated through slavery into freedom, cut off suddenly by emancipation and enfranchisement from the influences that had given him all the power he possessed, he wandered about like a child in the night of reconstruction after the false lights of political and social promise, away from the paths that led to industrial progress and economic independence. It was in his power for twenty years after emancipation to control the industries of the South. Had the energies of the race and the ambition of its leaders been directed to obtaining homes and acquiring wealth instead of political and civil power its condition to-day would be far better, not only from industrial and physical standpoints, but mentally, morally, and even politically. The present ideals and ambitions of the race belong to the distant future. For this generation and many yet to come there is need of radical change in negro education. His colleges of law, of medicine, of theology, and of literature, science, and art should be turned into schools for industrial training. Hampton Institute and Tuskegee should be duplicated in every Southern State—if possible in each Congressional district. The visionary ideals of Wendell Phillips and Frederick Douglass should give place to the practical work

of General Armstrong and Booker Washington. The wasteful expenditure of money for negro literary education in the public schools of the South should be changed into profitable and useful training in industrial schools, shops, and farms, maintained at public expense and under public direction, for negro education in each county or township of the South. The entire system of public education for the negro race, from top to bottom, should be industrial. As yet all the industries of the South are open to his employment. The door of his opportunity is not yet closed; but unless he speedily enter, armed with skill, training, and industrial power, it will close, and close forever. The skill and training which the race possessed in slavery must be regained. The new generation, now less capable than the old, must be taught to work. After handicraft will be time for headcraft. The race is not yet out of tutelage. Its industrial apprenticeship, begun in slavery, must continue in freedom. We must recognize the fact that the negro is still unable to stand alone. But the help he needs is not so much of books and "schoolmarms" as of tools and master workmen. He needs the aid, the sympathy, the daily instruction of his Southern employer. Every Southern household, farm, shop, factory, and mill might be a school for the training of the negro. It was so in slavery. But to-day the chasm between the races is deep and wide, forbidding interest and sympathy and authority on the part of the whites; docility, obedience, and zeal on the part of the blacks. Nothing will bring the races together again but the industrial skill and power of the negro. His education should look to this end. The race is entitled to live. Justice and humanity demand that it be given a chance. The duty and the problem are national. The burden is too large for the South. The National Government should aid in the industrial education of the negro until he is able to earn a decent living. Then may come independence and self-reliance, to be followed finally by culture, learning, and refinement. Give the negro a chance, a natural and reasonable chance, for progress, and either, like other races, he will aid the development and share the prosperity of great America, or, if slowly dying through race inferiority and incompetency, he lingers ages longer, a curse and a hindrance to the nation that made him slave, let it be said that the white race through every agency of training and education patiently and bravely endeavored to save the negro from extinction and equip him for free existence.

The necessity of industrial education is almost as great for Southern whites as for the negro. The industrial life of the New South must be based upon education. The education of the New South must lead to industrial life. The Southern schoolboy dream of statesmanship must yield to desire for workmanship. Our children must be taught to express their thoughts in work as well as in words.

The healthful happiness, the lasting utility, and the real nobility of genuine, downright labor, of labor wrought into things of beauty and value, must supplant the nervous excitement of mere intellectual gymnastics and the tiresome weariness of the mental treadmill.

Our present system of education is not in touch with life. The highest expression of the world's power to-day is not literary but industrial. The world's work is growing daily in character, value, and intensity, and is demanding for its performance not only labor but genius—genius of the highest order and thoroughly trained. Ours is an age of action and performance. The world's demand is not for skilled talkers but skilled workers. Mountains must be tunneled, rivers bridged, oceans led captive over continents, deserts irrigated, cities built into air and guarded from fire and filth, enemies to life detected and destroyed in plant and animal, goods exchanged between the ends of the earth, nature's forces harnessed to human service, and her crude material, infinite in variety and extent, fashioned into forms of beauty and utility to gratify the ever increasing desires and necessities of life.

This is the age of the engineer, the chemist, and the biologist.

The educational system of the South needs to be greatly changed, if not recon-

structed. For one hundred years our schools have manufactured orators, statesmen, and universal geniuses. The supply now exceeds the demand, and a change of industrial machinery is necessary. For declamation and dialectics we must substitute the microscope and the laboratory, the drawing board and the machine shop. The South needs workers, trained and skilled workers, in every department of industry. Rude labor will not suffice, even in agriculture. Our cotton crop has been trebled in thirty years. Improvements in cultivation, in machinery, in fertilizers, and in utilization of waste products have produced this wonderful result. The methods of slavery would mean bankruptcy to-day. Thirty years hence the crop will be trebled again and the methods of to-day will mean bankruptcy then. The same is true of all our industries. To remain stationary is really to fall behind. As ginning has supplanted hand picking, carding machines hand cards, and power looms hand looms, so the plaids and sheetings of to-day must yield to lawns and laces and muslins to-morrow.

The weavers of Asia are still using hand power. When they rise to steam and power looms the South must move up further or else be ruined. Industrial education is our only hope. Other people are employing it and revolutionizing their industries. Germany is dotted with industrial schools; of agriculture and forestry, of metal and woodworking, of weaving, bleaching, and dyeing. German goods are filling the markets of the world in spite of tariffs and hostile legislation. Great Britain is no less active; Japan, after her sleep of centuries, has awoken to life through industrial education. Even Russia is preparing for the struggle.

In the United States, outside of the South, the chief industrial centers have organized technical colleges and schools for manual training. In New England the public schools from top to bottom are looking to industrial training. Drawing and designing, wood and metal working, the plastic arts, the microscope and the laboratory, unused a century ago, are commoner to-day in the schools of the North than books of declamation and treatises on the human understanding. But not so in the South. We are stumbling along in the same old paths. Our public schools are not arousing public enthusiasm or inspiring public confidence. As a rule they do not deserve it. They are not following, much less leading, the industrial revolution of the South. Our system must be changed. Necessity will require it. We have reached the limit of skill and production without the help of industrial education.

Our public schools—kindergarten, primary school, grammar school, and high school—all should be strengthened with manual training. Every child should be taught to do something, to make something, and to make it well. Drawing, plaiting, weaving, coloring, designing, carving, and molding would be more useful preparation for life than learning the ancestry of Tiglathpilezer or the boundaries of the world as imagined by Ptolemy. Special industrial schools adapted to the prevailing industry of each district should be established in all industrial centers. The principles underlying each industry—chemical, mathematical, mechanical, or biological—should be thoroughly comprehended. Actual manipulation and experience in at least the leading lines of work should be required. Such schools would supply skilled workmen for every industry—wood workers, metal workers, leather workers, workers in field and forest, in mine and mill and factory, skilled workers, exchanging in the markets of the world finished goods for raw material, skill and knowledge for rude labor.

The system should be crowned in each State with well-equipped colleges of technology, offering complete instruction in the applied sciences and furnishing the State with an adequate supply of highly trained professional experts; with civil engineers for the construction of railways and bridges; with hydraulic engineers for the construction of dams and waterways and the transmission of water power; with electrical engineers for the creation, transmission, and application of elec-

tric power; with mechanical, mining, chemical, sanitary, and textile engineers; with architects, designers, inventors, industrial promoters, and managers.

The South must follow the spirit of the age. She will do so from necessity, if not from preference. Industrial competition will force her to it. Her resources are practically undeveloped and unlimited. She is amply endowed with all three requisites for the production of wealth; with natural resources, capital, and labor. Her natural wealth is the greatest on the continent. In variety and fertility of soil, in diversity and healthfulness of climate, in abundance and variety of minerals, in forests and fisheries, in water power and fuel, she is rich beyond power to calculate. She is accessible to world markets, both for raw material and for finished products. Her capital is abundant and easily increased by foreign importation; her white labor is native, of English, Scotch, and German stock, reliable, intelligent, abundant, and cheap. All conditions are favorable to the production of enormous wealth, and with it the promotion to a high degree of popular happiness and prosperity. The one thing lacking is industrial training and skill. Supply these and the South will be the paradise of the world, the realization of perfect democracy, where labor is so productive and wealth so abundant that there is leisure and opportunity for universal culture and universal progress.

EDUCATION AND PRODUCTION.

By CHARLES W. DABNEY,

President of the University of Tennessee.

Every lover of his country must rejoice in the great interest in technical education manifested recently in the South. It shows that we have at last come to recognize the deficiencies of our system of education and the one-sidedness of our present schools. The recent agitation for technical education grows directly out of the desire of the people to work up their own resources, their cotton, wood, and iron, and produce more wealth. Are we not in danger of taking too narrow a view of this subject? If increased production is our aim, we must begin by educating all of our people in the public schools, and not merely a few of them in technical schools. As patriotic men and women we want to see all of the people earn more, so that they may live better and happier. The difficulty with our system of education in the South thus far is that we do not pay enough attention to the common schools. We have given most of our thought in the past to the higher education and too little to the broader education. A complete educational system is like a pyramid; its base must be broader and stronger than any other part of it. Our present educational system, as far as we have any at all, is a column with a beautifully carved capital upon its top, which is altogether too large for the base and the shaft. The reason our institutions of higher education are not attended as largely as those of other States is because they have too few public schools to support them.

Technical education is important, but I beg my fellow-countrymen of the South not to forget that universal public education is more important. Let us begin at least by putting manual training and scientific branches in the high schools where all the children can have an opportunity for the broad training. If greater productivity is our aim we must first have better common schools. If we content ourselves with a few technical schools here and there, we will be greatly disappointed.

My first proposition, then, is that if we desire to produce more wealth in the South we must begin by building better public schools.

The chief characteristic of the nineteenth century has been the extension of the

benefits of education to the masses of the people. Its chief lesson is that education increases the wealth-producing power of a people in direct proportion to its distribution and thoroughness. In fact, the relations between education and productivity are so well understood now that you can measure the wealth-producing power of a people by the school privileges which they have enjoyed. Statistics show, for example, that the power of the people of the different States to earn money is in direct proportion to the length of the period the average citizen has attended school. To illustrate¹, the average school period in 1898-99 of each inhabitant of the United States was 4.4 years; of Massachusetts, which has the best schools, it was seven years; of Tennessee it was a little less than three years. The total annual production of the United States in the year 1800 was less than \$30 a year, or 10 cents a day, counting 303 working days in the year, for each man, woman, and child; by 1850 the production had increased to nearly \$92 a year, or 30 cents a day, and in 1899 it was about \$170 a year, or 55 cents a day.

MASS.	EDUCATION	14
	PRODUCTION	13

U. S.	EDUCATION	8.8
	PRODUCTION	8.5

TENN.	EDUCATION	6
	PRODUCT'N	5.8

The production of Massachusetts in 1899 was \$260 for each man, woman, and child, or 85 cents a day. The most favorable figures make the total annual production of the people of Tennessee in 1899 less than \$116 a year, or 38 cents a day, for each inhabitant. Another way to express it is to say that the average family of 5 in Tennessee must live on \$580 a year, counting everything produced on the farm and in the home, as well as sales and money wages, while the same family in Massachusetts has \$1,300 a year to spend, and the average family of the United States has \$850. Put these facts together and we at once see their tremendous significance. The proportion between the school period in Massachusetts, the school period in the whole United States, and the school period in Tennessee is expressed by the figures 7, 4.4, and 3; or, multiplying each by 2, by the figures 14, 8.8, and 6. The proportion between the productive capacity of each person in Massachusetts, in the whole United States, and in Tennessee is expressed by the figures 260, 170, and 116; or, dividing by 20 to bring to terms similar to the others, we have 13, 8.5, and 5.8. Think of this!

Education is as 14 in Massachusetts to 8.8 in United States to 6 in Tennessee.

Production is as 13 in Massachusetts to 8.5 in United States to 5.8 in Tennessee.

This is not a mere coincidence in the case of Massachusetts, the United States, and Tennessee. It is the law the world over. The productivity of a people is everywhere proportional to their education; that is, their intellectual, physical, and moral training. It is not the natural resources, the climate, the soils, and the minerals; it is not even the race, much as these things count in production, but it is education which above everything else determines the wealth-earning power of a people.

The Southern people have made great sacrifices for public education, and especially for the education of the negro, but they must prepare to do even more if

¹ The data used in this paper were derived from the Reports of the Commissioner of Education of the United States and of the State board of education of Massachusetts, from Butler's Education in the United States, from articles by Dr. William T. Harris, Commissioner of Education of the United States, and from the Tennessee State reports.

they are to keep up with the other States in production. The States represented in this association are still far behind the Eastern and Western States in the manner in which they support their public schools. Let me take for comparison the best school State in the Union—Massachusetts—and my own State of Tennessee, which represents, I find, the average conditions in the South.

The population of Massachusetts is 2,805,346; of Tennessee, 2,030,616. They have the same number of children to educate. The enrollment and the average daily attendance at their public schools in 1898-99 were as follows:

	Enrollment.	Average daily attendance.
Massachusetts	471,977	360,317
Tennessee	499,845	352,734

Massachusetts taught school 188 days in the year, and her enrolled pupils attended an average of 143.5 days. Tennessee taught school only 89 days, and her enrolled pupils attended only 62.8 days. The average Tennessee child is absent 26.2 days in the 89 days of the school session.

Massachusetts expended for all purposes of her public schools in 1898-99 \$13,889,838, which was \$38.55 per pupil in average daily attendance and \$5.07 per capita of her population. Tennessee expended for her public schools in the same year \$1,628,313, which is \$4.62 per pupil in average daily attendance and only 83 cents per capita of population. The average expenditure for all the States of the Union is \$19 per pupil in average daily attendance and \$2.67 per capita of the population of the entire country.

The power of education in production may be presented again in this concrete way: From the statistics above it is seen that Massachusetts spent in 1898-99 \$12,261,525 more upon her public schools than Tennessee; but see what a return she gets. Each one of the 2,805,346 citizens of Massachusetts—men, women, and infants—has, as we have said, a productive capacity of \$260 a year against \$170 a year for the average inhabitant of the whole United States and \$116 a year for the average inhabitant of Tennessee. The inhabitant of Massachusetts has thus an excess of \$90 a year over the average inhabitant of the United States and \$144 a year over the average inhabitant of Tennessee. This means that the people of Massachusetts earned last year \$252,487,140 more than the same number of average people of the United States and \$403,969,824 more than the same number of people in Tennessee. Twelve million dollars invested in superior education yield \$400,000,000 a year.

If the people of the South would compete in production with the people of the other States and of the world—and they must do so whether they will or not—they must educate all their children, not only their white children, but their black; and they must educate them all not poorly for a few months in the year and a few years in their lives, but thoroughly through a long series of years. If history teaches us anything it is the solidarity of all mankind, that “no man liveth unto himself,” and “no man dieth unto himself,” but that we are each our “brother’s keeper.”

Our great resources—climate, soils, and minerals—are useless in the hands of an untrained people. Moreover, if we do not educate our own people to use these resources intelligently the trained men of other States will come in and do so and make our native people “the hewers of wood and the drawers of water” in their industries.

Some persons seem to think that the marvelous energy and common sense of our people are a sufficient guarantee of their success in the battle of life; but common sense and even unmeasured energy do not win in these days without education.

We must give our people knowledge and training or they will surely fail in the hot competition of the twentieth century. Will we not realize that our best resources are our own children and that our highest duty is to educate them for the greatest usefulness in life?

Having made provision for the elementary education of the people on this broad plan, we may wisely turn our attention to the technical education. A complete system of technical schools comprehends the following:

1. A system of trade schools in which pupils are trained for the leading arts.
2. Polytechnic schools in which instruction in the applied sciences and technical or professional training are offered more advanced students.
3. Institutes of technology or departments of science in universities in which the highest professional instruction in the applied sciences is provided.

There is no difficulty in accounting for our early indifference in the South to science and technology. It was in accordance with the history of science the world over and with the laws of its development in all countries. Up to fifty years ago we had all the science, or more than we could use. We were engaged in getting out raw material, in "skinning" our soils, in cutting down our forests, and in working a few surface mines. Germany and France supplied us at first with our science and England or New England with our technical experts.

A young people always view their raw material as their chief source of wealth, and they are often too ready to barter it for a mere mess of pottage. When they become older, they discover that it is not upon natural wealth alone, but upon the culture of the scientific intellect that permanent prosperity depends. England was not a manufacturing nation until the Elizabethan age. Though coal, iron, and wood were found in abundance in the reign of the Plantagenets, they produced little prosperity. Their home-grown wool was sent to Flanders to be manufactured and turned into cloth. Spain, which had fallen heir to Arabian science, was the greatest manufacturing country of those days. When the Moors were banished and the political crimes of Spain led to its destruction as a nation, England took its position as the leading industrial nation of the world. The invasion of the low countries by Philip II drove the Flemish manufacturers, as the French persecution drove the Huguenots, to England, and they introduced the industries of cotton, wool, and silk in that country. In none of these countries was science a subject of study at this time. The acquisition of wealth must precede the cultivation of science. Technical skill is needed to utilize the raw material to the best advantage. The time comes, however, in the history of every nation when it must educate its people in science and train them in manufactures and industries or it will go down. This higher scientific education is the forerunner of higher prosperity, and the nation which fails to develop the intellectual faculty for production must degenerate, for it can not stand still.

In society, as in biology, there are three states. In the first, the state of primal equilibrium, things grow neither better nor worse; the second is the state of evolution or development, during which animals and plants adapt themselves to their environments and take on new characteristics; the third is that of degeneration, when they first stand still, then decay, and so go back to the earth from which they sprang. The same is true of nations. A nation may remain in equilibrium for a brief time in the early stage of its history, but it is impossible to hold its forces in balance when its environment is constantly changing. To stand still then, is to die. The life of a people industrially is science. We must feed its fountains and keep them pure or growth will cease, industry will fall, and the nation will die. Our southland stands at the beginning of the second state. We have lived as long as we can upon the bounties of nature, and have reached that point at which we must study science, learn the arts, use our material resources and accumulate wealth, or else fall behind and go down.

The study of science and the application of science always have gone and always

must go hand in hand. As a matter of fact, discoverers and appliers of science are often combined in the same person. The interests of pure science and of technology are largely identical; and science can not take a step forward without opening new fields for industry. New truth in science always leads to new developments in industry. Hence, we must have the inventor as well as the investigator. So, on the other hand, every advance of industry facilitates the experimental investigation upon which the growth of pure science depends. See how the glass industry has promoted the progress of chemistry, and how the electrical industry has in our own time aided physics and mechanical engineering. Pure science and technology can not be separated. Civilization began with man as a tool-making animal; it has grown with man as a machine-making being. It is not the classics or philosophy that alone makes a people strong; else India might have been the ruling nation of the world and England its province. Historically, technical progress did not follow the growth of science, but preceded it. Mining developed geology. Fisheries led to biology.

It is not generally known that General Lee was a great believer in scientific and technical education. Says Professor Joynes, his colleague: "General Lee's plans for the development of Washington College were distinct and definite. He aimed to make this college represent at once the wants and the genius of the country. Under his influence the classical and literary schools of the college were fully sustained; yet he recognized the fact that material well-being is, for a people, a condition of all high civilization, and, therefore, though utterly out of sympathy with the modern advocates of materialistic education, he sought to provide all the means for the development of science and for its practical applications." The Southern people have still to realize the ideals of Lee in education.

NEGRO EDUCATION IN THE SOUTH.

By PAUL B. BARRINGER,

University of Virginia.

Those of us of the South who have elected to abide by the South must, for that reason if no other, take a proper and natural interest in any specific class of its people which numbers nearly 40 per cent of its population. It matters not how insignificant this people may be when measured by economic standards, nor how humble they may be socially, nor how impotent politically; so long as they constitute 40 per cent of the population they are a factor which must be taken into serious account whenever we think of the South and its future. If this 40 per cent—the negro race—improve, the South to that extent will improve; if it go backward, it will either carry the South with it, or, failing in this, it will demand as the price of progress an expenditure of energy on the part of the whites which no people can endure.

All general questions of humanitarian interest aside, what is the present outlook for the negro, and therefore for the South? I say general questions of humanitarian interest aside, because he who approaches this great problem in the spirit of the doctrine has no place in the councils of the South, be he for the negro or for the white. This is not a matter of sentiment, but of interest—acute, present interest. The question is one land for two peoples, and these the most divergent. This one land—who can best rule and administer it with benefit to the greatest number, the white man or the black? This is the Southern problem, the race problem, the negro problem; but the education of the negro is its most important factor. We of the South are to educate him. Shall we prepare him to be a political antagonist? Shall we make of him an economic antagonist; or can we prevent him from becoming either, and yet have the South, as a whole, improve? That is the question.

I am sorry that I have to mention political antagonism, but the case can not be fairly presented without it. The political antagonism between the Southern white and black is manifested by the fact that since his enfranchisement the negro has, as a race, voted solidly against the measures, local or general, advocated by the white people of the South. This is a peculiar fact, because nine times out of ten there is a personal friendship between every black and the whites he knows. This antagonism, therefore, is not personal, but racial.

This was not always so, for there are hundreds here who remember the old slave days, the manifest affection of the negro for and his pride in the old master, the mistress, the young master, and all. * * * After the war, we all remember how short was the first racial flight of freedom; how, like birds, startled but not affrighted, they circled but to return. It was not then. No, the antagonism between the Southern whites and blacks has come since the war, and it is now reciprocal. It is now race against race. What has caused it? This question, daily asked, is hard to answer, because no one cause is responsible. There are two great causes—the one political, the other economic.

As to the political cause. For over a century preceding the war between the States slaveholders dominated this Union. They gave it its flag and thirty-four out of forty-four stars on its field. They gave this Republic every general that carried this South-made flag to victory against America's foes—Washington, Jackson, and Scott. They gave to America every creed and policy which we even now invoke as fundamental. Liberty and freedom—Jefferson; the Constitution and its father—Madison; no foreign entanglements—Washington; America for the Americans—the Monroe doctrine—Monroe; Southerners all. They gave her everything of which she can well be proud and nothing of which she need be ashamed.

But the war brought a change. With army gone, people, land, and credit exhausted, the South stood as "on her sheepskin," expectant. What did her people expect? They expected to see a new symbol added to the flag of their fathers; a steel-blue bar across stars, field, and stripes, and riveted at every joint. This would have been truly fitting. They expected, moreover, to see a new amendment added to the Constitution which would declare the dogma of State sovereignty forever dead. They saw neither. The flag still waves as before, the unchanged blazon of their fathers' deeds; and, as far as statute is concerned, the Union is still on the basis of the tenth amendment or the "secession of 1787." What they did see were the thirteenth, fourteenth, and fifteenth amendments to the Constitution.

The purposes of these were quite distinct. The first (thirteenth) gave to the negro freedom, while the last two (fourteenth and fifteenth) gave citizenship and its attributes. The first, intended by the donors as a recompense to the negro for years of servitude, has become a threatening source of racial decay through an economic revolution now just becoming evident. The second * * * has failed. Its immediate result was the production of race hatred, and is now becoming a source of peril to our public policy. The attempted degradation of a proud people was simply a sectional crime; but a brake on the wheel of national expansion is, if possible, a greater evil still, and this the fifteenth amendment has put. Two more Southern stars—Arizona and New Mexico—and then we stop.

We dare not give statehood to even the islands already under the flag, with their Spanish-American, Chinese, Malayan, and Polynesian population. A government of the people, by the people, and for the people can not exist with the franchise for such as these. We must, as a nation, now confess that only intelligence can rule, for we know the political stability of the Spanish-American and his "republics." we know China and the Philippines, and Wilcox is with us! No; the bill for the reduction of Southern representation will never pass, and negro disfranchisement is to stand. America now sees the handwriting on the wall, for she faces a golden opportunity with hands tied.

The fourteenth and fifteenth amendments have been failures. Let us look at the thirteenth, which opened the economic problem.

It has always been a mystery to the people of the North why the nonslaveholding class at the South fought so ardently during the war. No explanation seems to solve the mystery for them. Let me first note, by way of explanation, that in the mountains of North Carolina, Tennessee, and Virginia (now West Virginia), where the negro was unknown, the poor whites did not fight, or else fought on the Federal side. Let me also recall that the enormous emigration that took place from the South was chiefly a labor emigration, and even the wealthy, when threatened with poverty, fled from the South. These things were because every workingman who knew the negro looked with a holy fear upon the day of his emancipation. With the well-fed chattel, the expensive slave, he could compete; but with the starving negro of freedom he had not a ghost of a chance. In the fated language of Professor Ross, late of Stanford University, speaking of the Chinaman, the white man can "outdo" the barbarian, but the latter can "underlive" him, and there's the rub.

The laboring man, who alone knows what it means to have to underlive his fellow, will always hate the negro on contact. There are to-day thousands of negroes in the South living on a ration that costs 6.5 cents a day, or less than \$2 per month, while, if pressed, they can live on the half of it. Imagine the fate of the white man who has to compete with such labor.

Lured by higher wages, many negroes are now making pilgrimages to the North—to New York, Philadelphia, and Chicago. As a rule they are the best-trained workers of their race in the South, and hence the highest livers, but they underlive all competition so easily and cut wages with such profit to themselves that the hatred of the negro, always felt by the white workers of the South, is beginning to be felt at the North; and this is the true and only reason of the later race riots there. Wherever the negro goes disenchantment follows. The old slave owner, his natural friend, is now, as we have seen, against him as a political foe, and the poor whites of the South still hate him as an economic enemy, while the laboring men everywhere now recognize that the "deification of the darkey" was for them a mistake.

There is one other class in the South, fortunately a small one. I refer to the men of wealth or education whom the war and its consequent social chaos brought down to poverty and personal manual competition with negro labor. Thirty years of unrequited toil has broken and soured them, till any "ism," from populism to nihilism, finds fertile soil. They have not risen; they have done well even to "mark time" in the ranks; but through the public schools their children are rising, and they are the hope of the South and nation. A distinct generation is coming with an hereditary intelligence sharpened by adversity; but with their very mother's milk they have drawn in a hatred of the negro race that is a hate infernal.

I have here briefly presented the facts leading up to present conditions. Some of these will change and some will not, and the last to go will be the bitter economic antagonism of the white Southern laborer. When you leave this out, you are leaving the Southern problem. If the political question is not reopened, the antagonism of the dominant class will be at once withdrawn. This class has never been and will never be influenced by negro competition, and if the fifteenth amendment is nullified as at present, or, better still, repealed, they will have nothing more to ask. Their antagonism will die with politics; the laboring antagonism dies only with the man. We might as well be frank. These conditions exist and they seriously complicate the case as presented by the negro himself, which is about as follows:

Having received from the South, American residence, the English tongue, the opportunities of the Christian religion, a sound body, and thorough training in

agriculture and all the domestic arts, he, after two centuries, received from the North, freedom, citizenship, and the ballot. In the next generation he received from the two sections two hundred millions in education, and he still stands a beggar at the door of the South, now a criminal beggar. What are we to do with him?

As he has grown in criminality and physical depravity since receiving what he has of education, that kind of education is surely a failure. Moreover, he has used this education, given in compassion as an arm of defense, as a weapon of political offense against those who gave it. Under the circumstances there is a natural and growing sentiment in the South demanding that we give him only the pittance that he himself produces as a taxpayer, and then let him shift for himself. The object of this paper is to protest against the adoption of this policy as economically unwise and as unworthy of the South. We should as soon think of withdrawing our subscription to the church because its Sunday school class had missed its lesson. It would be better to double your subscription and get better teachers. No! We should not and we will not withdraw from the negro the one and only hope of his race—the white man's support. Noblesse oblige.

So far we have been consistent. Of all the sections the South now alone presents in her history that rare virtue. In all the years of her domination, from Roanoke Island to Appomattox, she claimed just what she claims now, namely, that American citizenship was a privilege of the highest kind, reserved for the highest type, and that degraded and barbarous races, specifically marked by nature as inferior, were unfit for its functions. She set the white man up as the guardian and the example for the savage. The North claimed that the Union was an asylum for all, and that citizenship was for all, regardless of race, color, or previous condition. Her sincerity has ever been open to doubt; shall we let ours be so likewise? It will be if, claiming that the Southern slave owner was the only sincere friend of the negro, we let him revert to savagery under our very eyes. We can not lay down the white man's burden yet.

It is now suggested that the hope of the negro is industrial education. It is hailed as a discovery, and it is shrewdly claimed that this education will check political antagonism. This is a mistake. Any education will be used by the negro politically; for politics, once successful, is now an instinctive form of warfare. The question, then, plainly put, is simply this: Shall we, having by great effort gotten rid of the negro as a political menace, deliberately proceed to equip the negro of the future as an economic menace? Shall we, knowing his primitive racial needs, arm him and pit him against the poor white of the South? Shall the educated class of the South to whom the lower classes, both white and black, look for guidance, indorse a policy which will certainly promote racial warfare?

It is all very well to ignore racial hatred in New York and Chicago, with a policeman at every corner and politics behind every policeman, but do it long enough even there and a time will come when there will not be policemen enough. To-day if the hand of official "protection" were withdrawn, the negroes of these cities would have short shrift. Labor fears and hence hates the man who can underlive a church mouse, be he Chinaman, negro, or Malay. Shall we see a negro and Malay exclusion act? In the South, policemen do not patrol the fields, and race hatred must be kept down if only for the sake of the black. Read any account of a Southern race riot and see who usually furnishes the funerals. Almost always the black.

There was never before on the face of the earth a people more law abiding, patient, or long suffering in the face of great temptation than our white yeomanry of the South. Living beside an alien race which they know to have been the cause of their poverty, which they recognize as having corrupted their manners, their morals, and their speech, and which, above any other race, degrades labor, they spare him. If you have race riots on tap at the North from a beginning labor competition, what would happen were that mongrel city brood exposed to the

temptations daily long present at the South? Our people have been brought down, but they still have the Saxon virtue of the courage that dares refrain. Do not press them.

To see how best to educate our two races at the South, let us look into the recent progress of this section and see what it shows. In 1895 there were about two and a half million spindles in the South, at the close of 1899 5,000,000 spindles, to-day over 6,000,000. What part has the negro labor played in this extension and what part the white? In furnishing the raw material, the cotton, he plays the old slave-day part, but in the function of the new South, in manufacture, he has no part. It may be asked has he had the chance? Yes, in Charlotte, N. C., and in Charleston, S. C., he has been tried in the clothing factory and in the cotton mill, and he has failed in each case. The reason of his failure was the absolute lack of moral responsibility. While perhaps capable enough, an excursion, a circus, or a revival always had claims upon him in excess of his obligations as an employee. You may make him a perfect physical imitation of the workman, but morally he is the negro still.

We have just seen the first great labor strike in the South. For months 4,000 white mill hands stood out against their employers. These mills could have been filled at any time with cheaper negro labor, but it was not done. When the cold, practical logic of economy turns down an opportunity like this there is a reason. The reason was the absolute mercantile distrust of the moral stamina of the present black.

While the negro came out of slavery illiterate, he was not ignorant of the trades and the mechanic arts. He was the smith, the carpenter, the shoemaker, the tanner of the plantations of the South. Trained to labor as few white men were, and with labor ever in demand, he is still the laborer and the common mechanic; rarely the skilled artisan. He has not kept pace with his opportunities. All this is suggestive, and leads to the conviction that it would be folly for any State to enter upon the industrial training of its deficient race while the laboring class of its higher race is equal to any training and any effort. We can not equip both, and to equip the negro to the neglect of the poor white would be a grave political error and an economic absurdity.

The average negro is so light-hearted, so gay, and so free from care that he gives a pleasant impression, but in all his actions he shows the mimic. He provokes an involuntary smile, and we ignore the lack of the genuine article. These characteristics are generic, and in varying degrees they make up our idea of the negro to the extent that we habitually discount his faults, vices, and defects. In fact, we set for this race a different standard from our own. The result is that any old suit makes the negro a "dude," reasonably fluent speech makes him seem the "orator," while a fair address and intelligence so dumfound us that such a negro "shines as a one-eyed man amongst the totally blind." He is never what he seems. What we may call a "good" manservant may be, and sometimes is, an absolute liar, something of a thief, and quite a rascal. A "good" nurse or cook may be anything, provided she can nurse and cook. We pay no more attention, as a rule, to the moral atmosphere of the kitchen than to the stars of heaven, and the kitchen and our children suffer. We pour out our blood and treasure on the literary heathen of China, and shut our eyes to the greater need of missionaries at home. What the negro needs as a race is moral training, some "thou shalt not," something to form character. When we have given him a morality which will save him from degeneracy and the hand training which will make him an even respectable servant or laborer, then, and not till then, may we think of the technique of the higher industries.

The public-school training of this people should be primarily a Sunday-school training; a moral training, given by those to whom morals mean more than words. This training the whites must give financially and, in large measure,

personally; for there are not enough properly qualified teachers of the negro race to do this work. In the midst of peace and opportunity we now see daily from this race spontaneous evidences of reversion to savagery which make us utterly distrust the influence and the capacity of those thus far responsible for their training. It seems as if every paper adds something new to the catalogue of negro crime.

Their moral training should be supplemented by the three R's and such simple training in agriculture and the domestic arts as all will need. The negro race is essentially a race of peasant farmers and laborers, and their education should first be directed to improving them as such.

It is claimed that since education has raised up for this people its own leaders, the problem is solved. Far from it. An education that makes leaders at the expense of the led is a failure. Every negro doctor, negro lawyer, negro teacher, or other "leader" in excess of the immediate needs of his own people is an anti-social product, a social menace. Neither in the North, the South, the East, nor the West can such a professional man make a living at his calling through white patronage; and to give him the ambition and the capacity, and then to blast his opportunity through caste prejudice and racial instinct, is to commit a crime against nature. Nature made the white man and the black; it made the natural and unalterable prejudice between the two races; and hence the crime lies at the door of him who knowingly attempts the impossible. In equal measure what is true of the professional man is true of every trade and calling in which the negro's natural qualifications are not first considered. As a source of cheap labor for a warm climate he is beyond competition; everywhere else he is a foreordained failure; and as he knows this, he despises his own color. When a race is in such a condition that every paper issued by its educated class carries advertisements of nostrums openly claiming to produce such changes in hair and skin as will make the black man less a black, what are we to think? When its reading, and hence its higher, class give such patronage as to maintain these advertisements in their papers year after year, what would you give for the influence on them of any "leader" whose skin and hair bore, in however slight a degree, the same racial stain? The very solution of the negro problem is a part of the white man's burden.

But it is asked, How are we to continue to educate the negro at all and avoid future political trouble? In answer I say: Base his franchise upon a property qualification, and give him for once a legitimate stimulus to work. He has never been offered an attainable ideal before. To-day the partly educated black, jail-bird or preacher, looks with contempt upon the negro whose only forte is honest work and accumulation. Let us change this and make the taxpayer and not the politician the racial ideal. The temptation to spend is inherent in the human race; to learn to save is to cultivate man's highest power, the power of inhibition. When a man can hear and obey any "thou shalt not," monetary or moral, he is improved as a citizen. The Jew has had this mandate longer than any other race, and he is the greatest of all accumulators and the least criminal of races. The negro is the most criminal, and he needs the mandate.

One truth about the trouble with our negro ballot in the past is instructive.

The poor white, in competition with negro labor, has had to work his children to live. The negro, easily underliving him, was able to use this same white man's taxes in the public school, and hence has given his children the rudimentary knowledge now necessary to vote. This is fast making a reading, voting, pauper class of blacks and an illiterate, working, taxpaying class of whites. Which of these classes has most interest in the State and most right to be heard? This political paradox must be changed, so changed that it will still allow us to work for the salvation of the negro. With an educational suffrage, the first step toward improvement—education—is the first act in a political feud. Let us be done with it and be free to help him and make him help us.

As for ourselves, let us go back to the old rule of the South and be done forever with the frauds of an educational suffrage. Let us break up the game that produces political professionalism. Let us return to the political status we had when we furnished the men of America. In national politics also let us strive for truth and consistency. We can not be high and mighty in the Philippines and high and holy in Cuba and maintain the respect of the world. It is now more than a generation since the war, and our fanatical altruists have posed long enough. Let us see that the hypocrisy that now ties our hands in Cuba is the last act of the comedy. We of the South are by heredity the expansionists of America; and as we must expand, let us strive to be honest expansionists. Let us boldly say dollars in lieu of duty and land in lieu of liberty.

NEGRO EDUCATION IN THE SOUTH—A REPLY TO DR. BARRINGER'S PAPER.

By JULIUS D. DREHER,

President of Roanoke College.

The education of the negro in the South, taken in its broadest sense, is the most difficult problem before the American people to-day. It is not a simple, but a complex problem. If it were simply to provide good schools for the colored people, the task would tax the wisdom and resources of the South, but we have to deal with the more difficult question of so educating the negroes that their relations to the white people may be finally so adjusted that both races may live together peaceably on a just economic and political basis. In any serious discussion of this problem we may as well take it for granted—

- (1) That the negroes will remain in the South;
- (2) That the fifteenth amendment will remain a part of the Constitution; and, consequently,
- (3) That the negro will remain a voter.

We are confronted, therefore, with a great humanitarian problem, which is also economic and political, and which, while being national, is also in a peculiar sense a Southern problem. How shall we so educate the negro as best to develop his manhood, make him a valuable economic factor, and fit him for intelligent citizenship?

After more than thirty years of effort in trying to solve our problem we all agree that it was a grave mistake to suppose that with a ballot in his hand and a book under his arm the negro could make substantial progress simply by acquiring a certain amount of knowledge in ordinary schools. We believe that it was also a mistake to establish at first so many institutions of higher education, a large proportion of these being called universities. But the negro has had thirty-five years of freedom, during which he has made considerable progress in acquiring education and property, so that it would be a greater mistake to assert to-day that he does not need higher education at all. If we think for a moment how many ignorant teachers and preachers are trying to instruct the negroes, we shall be quick to recognize their need of many more educated men and women than are now to be found among them. In order to advance in civilization every race needs educated leaders—concrete examples of what the best of the race may aspire to be; but what the negro certainly does not need is a class of educated idlers who wish to live simply by their wits.

It seems to me that for many years to come the education of the negro should be of a very practical character, such as is given, for instance, at Hampton and Tuskegee. The prevalence and increase of crime throughout our country may well

cause us to suspect that our system of education for the white people might also be improved by introducing more of the practical and industrial into our public schools. As almost every line of industry and business is open, at least in the South, to the competent of both races, there seems to be no need for a radical difference in the education of the masses of the two races. It might be well to give more attention to moral and religious (not sectarian) instruction in all our schools. As to the "Sunday-school training" advocated by Dr. Barringer, that should be left mainly to the negro churches; but I believe it would be a distinct advantage to the negroes at present if they had more white teachers in their Sunday schools and also in their other schools.

As the white people own nearly all the property, and as the negroes are mainly laborers on farms, the education of the latter should be to as large an extent as possible industrial and practical, in order that they may the more readily make a living and improve their mode of living. Little can be done to elevate any people until they begin to acquire property and independence, until they become self-supporting and self-respecting, as we have learned from our costly experience with our Indian tribes. We must teach the negro the value of steady habits, so that he may become a reliable workman; the necessity of economy, so that he may gradually acquire property; the importance of raising the standard of his social and domestic life, so that his character may be improved, and the need of education, in order that he may be fitted for intelligent and patriotic citizenship. The low standard of living among the negroes tends to depress the price of labor, and thus injuriously affects the white workman. Wherever there is a low standard of living and of morals among the colored people the white people suffer from it; and if in any part of our country there is marked improvement in the general condition of the weaker race, the stronger race will be favorably affected by such progress.

If in any line of industry the negroes bring sharp competition to bear on white workmen, it is not a matter to be wholly deplored on account of the latter, for this very competition will cause them to become more efficient in their trades, and efficient labor, as we all know, is a crying need of the South. If there is danger that the white mechanic may be displaced by the better-trained negro mechanic, let us not for that reason give the latter less industrial training, as suggested by Dr. Barringer, but rather let us provide the same sort of education for the white man, and then let there be an open field for fair competition on the basis of merit. It is to be hoped that our Southern people will not discredit their own profession of interest in the negro by shutting against him doors of opportunity for making a living as has been done at the North, where his position and inferior advantages and opportunities to better his condition are so discouraging as to account largely for race deterioration and crime. If odds are to be given in the race of life, industrial and political, surely the Anglo-Saxon with his centuries of education, achievement, and accumulated advantages will not be so lacking in chivalry, generosity, and Christian spirit as to ask odds at the expense of a weaker race, which is only now fairly setting out, with uncertain step but steady purpose, on the ample highway of a larger freedom and higher civilization.

In the solution of our problem the fortunes of both races in the South are involved. We must help to lift the negroes up or they will drag us down. As the Republic could not exist half free and half slave, so no Commonwealth can long prosper with one half of its citizens educated and the other half illiterate. We must convince our people that no investment pays better dividends than that in brains. In Massachusetts, for instance, where the best educational facilities are freely provided for all classes alike, the average price of a day's labor is more than double the average price in the Southern States; and, although that Commonwealth is the most densely peopled in the Union, the census just taken shows that its population increased more than 25 per cent in the last decade, while that of Virginia increased less than 12 per cent. In the South every effort should be made to

lengthen the school term for the children of both races, and we ought to hear nothing more of that unwise and unpatriotic suggestion to divide the school fund between the races in the proportion of taxes paid by each, a proposition against which I am happy to know that Dr. Barringer protests.

The more education and property the colored people acquire the better for the State, for they will thus become more valuable citizens. If the negroes of Virginia had as much property per caput, and as high an average in intelligence and education as the white people, does anyone doubt that the State would be immensely benefited? And if we could to-day lift up the entire colored population in the South 100 per cent in property, education, character, and general civilization, would we not be far on the way toward the solution of our problem? That problem, as well as all the other problems of humanity, must be solved, if solved at all, by the power of religion and the right sort of education.

After a somewhat careful study, I have come to the conclusion that the negroes are generally more eager to educate their children and improve their condition in life than are the middle and the poorer classes of white people. The self-denials and sacrifices of colored parents to educate their children would make a story at once pathetic and inspiring. The present able State superintendent of schools in Georgia told me nearly two years ago that he had frequently used with good effect the example of the negroes when he was urging white people to take more interest in the education of their own children.

We who have spent our lives in the South, and especially those of us whose experience and observation antedate the civil war, know well how much the contact of the white people did to civilize the negroes during slavery. Wherever this contact brought the races into relations of closest sympathy and interest, the best results were produced. As educators we know that unless a teacher has the confidence of his pupils, he can do little more than instruct them from the text-books, while the more important work of molding character is scarcely touched. So in adjusting the relations of the races in the South, mutual sympathy and confidence are as much needed as education from books and in trades. The negro is naturally influenced more by the acts and example of the white man than by his words. In working out our problem it is of the highest importance that the negro should trust the white man as a friend and well-wisher, and that the latter should set an example of absolute fairness and justice in all his dealings, as well as in making and executing laws. The blighting results of reconstruction left a wide political gulf between the races. To bridge that gulf should be the aim of the statesman, teacher, minister, editor—of every true patriot of both races in public or in private station.

It must be counted as unfortunate, therefore, that recent legislation in several States has seemed to justify the negro's belief that the white people are unwilling to do him justice; and it is also to be deplored that in so many cases of all sorts of crimes mobs of white men in all parts of our country have trampled law under foot by undertaking to do what should be left to the calm deliberation and decision of courts and juries, after the evidence on both sides has been duly presented and considered. Such examples of injustice in making laws and of lack of respect for laws on the statute book hinder the good work of establishing and maintaining harmonious relations between the races, and thus far render the solution of our problem still more difficult. Example is more powerful than precept. Lawlessness breeds lawlessness, hatred begets hatred, revenge incites to revenge. If we sow the seeds of wrong and injustice, of hatred and revenge, of cruelty and brutality, we can not expect to reap the fair fruits of Christian civilization.

If it be true, as Dr. Barringer asserts, that "a distinct generation is coming with an hereditary intelligence sharpened by adversity, but with their very mother's milk they have drawn in a hatred of the negro race that is a hate infernal," then

it is high time to do missionary work to save the civilization of the white people of the South. Such hatred is no part of our religion, and has no place in our civilization. And if white people are growing up with such diabolical hatred of the negro, what answer do you expect this "man with the hoe" to make to such a challenge in the next generation? But I do not believe that Southern mothers are teaching such bitter hatred to their children, and it is difficult for me to understand why Dr. Barringer makes such a bold assertion. It seems to me to have little, if any, foundation to support it; and if I did not know that his creed is that of the stern orthodoxy of the Presbyterian Church in the South, I would suspect that he had been reading Universalist books and had thus been persuaded to adopt a much milder idea of things infernal; or else we must charitably suppose that when Dr. Barringer speaks of "a hatred of the negro race that is a hate infernal," he is simply indulging in superfluous rhetoric.

As one deeply interested in all the facts bearing on our problem, I wish Dr. Barringer would produce some proof to substantiate also the statement that "we now see daily from this race spontaneous evidences of reversion to savagery." White men occasionally act like barbarians in America, as they have been recently acting also in China and elsewhere, but we do not believe for that reason that the race is reverting to savagery. Neither do I believe it about the negroes.

At the present time, when the negro is being eliminated as a political factor, it may seem inopportune to speak of educating him as a voter; but I am discussing this question in the firm belief that it can not be settled by temporary makeshifts of doubtful morals and still more doubtful expediency. Whether it takes one century, or two, or five, to solve this problem, we may be sure of one thing, and that is that it will never be settled by injustice. The truth may be so obscured now as to be only dimly apprehended by people in the South, but it remains true that it is the chief glory of our country that it is great enough to give equal rights before the law to all classes of its citizens of whatever race or condition. If it be taken for granted that the suffrage has been made too free throughout our country, it must, nevertheless, be admitted that at the present stage of the negro's advancement whatever restrictions are placed on the elective franchise, whether of education, or property, or both, should apply with equal justice and fairness to the voters of both races alike. And it should be borne in mind that it is a far wiser policy to fit men for intelligent citizenship than to disfranchise any considerable number on account of illiteracy or poverty. For as James Russell Lowell so pertinently says in his address on democracy: "It may be conjectured that it is cheaper in the long run to lift men up than to hold them down, and that the ballot in their hands is less dangerous to society than a sense of wrong in their heads."

Our Southern people, with their love of fair play, will not long tolerate laws which put a premium on the intelligence of the negro and on the ignorance of the white man—laws which incite the former to make the utmost efforts to qualify himself for the intelligent exercise of the elective franchise, and which encourage the latter to remain in a state of chronic apathy with regard to education. A law which in the letter discriminates against the negro and which has an "understanding clause" by which it is intended that he shall be further discriminated against at the ballot box according to the whims of the officers in charge is a discredit to any civilized State that pretends to legislate on a basis of equal justice to all its citizens. Such laws operate to the injury of both races. The negro is profoundly discouraged in his efforts to educate and improve himself; he resents the injustice done to him and still further distrusts the white man, while the latter loses respect for laws which permit such injustice. Already from Mississippi and Louisiana we are hearing reports of alarming apathy among the white voters, indicating that there is little political life in those States. As a matter of fact, the election returns of last fall show that there is one Congressional district in West Virginia

and others in various Northern and Western States in each of which more votes were cast than in all the Congressional districts together in either Mississippi or Louisiana.

We have happily passed the period when negro domination was possible anywhere in our country. Any State in the South could now pass laws of absolute fairness to restrict the suffrage without the least risk that the evils of the reconstruction period would ever be repeated. Hence it is our plain duty, as well as good political policy, to treat the negro with sympathy, justice, and absolute fairness, and to condemn in individuals or States anything like duplicity, chicanery, and injustice in dealing with them.

Let us not forget that the negroes are not to be blamed for their present situation. They did not come to America of their own accord; they were patient and submissive through generations of slavery; and they had little to do in gaining their freedom. Instead of taking part in the struggle which involved their freedom, the slaves, as guardians and protectors of the families on the plantations, exhibited a faithfulness to their trust which should entitle them to the lasting gratitude, kind consideration, and patient forbearance of the white people of the South. The suffrage was thrust upon the freed negro when he was wholly unprepared to appreciate and discharge such grave responsibilities; and, in spite of his mistakes and blunders, it should be said in justice to him that in his political life he has been rather sinned against than sinning. But he is learning. His political illusions, with others, have been dispelled by the stern logic of events. He now realizes that the road to manhood and character and independence is a long one, and the journey painfully tedious; that there are no short cuts, and that he must at last work out his own civilization as the Anglo-Saxon gained his, through centuries of effort and struggle and conflict. We can not, however, turn a deaf ear to this last child of the centuries in his appeal for all the help and encouragement we can give him.

The negro is now our trust, our charge, and our burden. We dare not be faithless to that trust. We should not forget that the white man's burden will become even heavier in the coming years if he withholds his sympathy and help from the black man in his efforts to lift up himself and his race. We dare not do him injustice by any policy of industrial or political repression or suppression, and we can not afford to degrade our Anglo-Saxon manhood by hating or wronging our weaker brother in black. By as much as we are superior to him in civilization, by just so much are we under the greater obligation to help the less-favored race in every worthy endeavor for moral, social, and material progress. Whatever may be the fate of the negro in the future, we should not shrink from the responsibility of doing our duty manfully in the present; and if we do the right as God gives us to see the right, we may with unfaltering faith leave the consequences to that gracious Providence which has blessed our nation through all the eventful years of its history.

For right is right, since God is God;
And right the day must win;
To doubt would be disloyalty,
To falter would be sin.

DISCUSSION.

By H. B. FRISSELL,

Principal of Hampton Institute.

I approach the discussion of the subject before us with a certain reluctance, for I realize that there are men in this audience and on this platform who know much more about this problem than I do. For though I have lived in Virginia for many years, I am not to the manner born. I realize that this is a Southern man's prob-

lem; that if it is to be worked out at all he is to do it, and that we of the North can only help. If I have any fitness for the task it is because I have had such good teachers. For years I have sat at the feet of Dr. Curry, whose grand work in the cause of common-school education is known to you. I am glad of a chance to express publicly to-night my sense of obligation to him for the sympathy and help that he has rendered Hampton. I take no such dark view of the relation of the races as Dr. Barringer does. I have lived in Virginia for twenty years. During all that time I have worked alongside of Southern white men, most of them mechanics, and I do not believe that the average Southern white man hates the black or that there is any danger of a race war. Most of our shops at the Hampton school are in charge of Southern white men, and I have never found a more loyal, devoted body of men, or men more interested in the improvement and uplift of the negro youth. I should be glad if I had time to tell you stories showing the pride that these white men take in the progress of their black protégés.

I live in a community where the blacks largely outnumber the whites, and where both whites and blacks receive the highest wages that are paid in any part of this State. There is the least possible friction between the two races. It may be that I am not an unprejudiced witness in this matter of the relation of whites and blacks, for I have been connected with a negro school that has received continually the strongest evidences of sympathy and interest from the governor and superintendent of instruction down to the plainest citizen of the State. Year after year the Senators and Representatives of this State have pleaded in the Halls of Congress for an appropriation for Indians. Through Dr. Curry, that eloquent apostle of education for every man, white or black, the school has received generous appropriations from the Slater and Peabody funds, and from every part of the country have come assurances of kind feeling. It is not easy under such circumstances for me to believe in race hatred or race wars.

Some years ago there was a suggestion that the school's industries, which are quite extensive, were interfering with the industries of the town. It was proposed by the citizens, and cordially seconded by the school authorities, that a committee of the senate and house of delegates be sent down to investigate the matter. A hearing of three days was given in the county court-house. Witnesses were summoned from every walk of life—merchants, mechanics, and farmers—white and black. There was not a single case of a man who wished the school withdrawn. Not only was it shown that the school was bringing thousands and tens of thousands of dollars into the town, not only did merchants show that their trade was largely helped by this negro school, but one white contractor after another testified that he had gotten his first start in his business in helping to erect some one of the school's sixty buildings. The farmers testified as to the better stock and machines and the improved methods of farming which the school had brought into the community. From every class there came the most cordial witness to the fact that the school was not only not a hindrance but a great help, not only to the blacks but to the whites. They showed what I firmly believe to be always the case, that just as one finger can not be fattened without the others, so you can not lift up one portion of a community without lifting up all of it.

The report of the joint committee of the senate and house of delegates is one of the strongest campaign documents that the school has ever received. In it Judge Cardwell and his associates say: "The institute has been a great benefit to this county and to Hampton, giving employment to a large number of citizens, white and colored, bringing annually tens of thousands of dollars to the community. It has been one of the means of building up this part of the State; population has increased, every branch of business has been made more prosperous, and, indeed, it is a self-evident fact that the Hampton Normal and Agricultural Institute has spent a vast amount of money in the community, bringing great benefit to all classes of citizens."

This testimony as to the value to all classes of the proper education of the blacks, and the kindly relations resulting from it, comes from some of the wisest lawyers and business men of this State. But similar testimony to that given in regard to Hampton has been given in the case of the schools started by its graduates all over the South. Booker Washington was a graduate from Hampton, and started a school on the same plan in Tuskegee, Ala. We have sent 50 of our graduates to help him carry it on. In his autobiography, which is just appearing in the Outlook, he bears witness to the uniform kindness shown him and the school by every class in that community. He was called to make the chief address at the opening of the Atlanta Exposition and was cheered to the echo. I much doubt if there is any white man in the South more cordially loved and honored by the whole South and the whole country than this black son of Hampton and the Old Dominion.

What Mr. Washington has done at Tuskegee in a large way, hundreds of Hampton graduates have done all through the South in a small way. I went not long

since to the town of Lawrenceville, in Brunswick County, in this State, where a Hampton graduate has started an industrial school. I met the leading white physician of the place. He told me that he was the school physician, and commended the work. I found that the leading lawyer of the place was the school's treasurer. Every white man in the town whom I met had only pleasant words to say of this colored teacher who had started in the black belt of Virginia a smaller Hampton.

I could take you to certain counties in this State where not many years ago the blacks bore no part of the burden of taxation, but to-day are paying one-fifth of the property tax. I could take you to counties where crime is reduced to a minimum and the relations between the races are of the pleasantest. There has been an increase of the land holdings of the blacks in the country districts of Virginia of nearly one-third in the last six years. Hampton has sent out between five and six thousand young people since its founding. So far as we can find out there has been only one of them behind the bars, and there has been absolutely no complaint of unkind treatment by the whites.

What has been true of Hampton graduates has been true of the blacks that other schools have sent out. The leading citizens of Winston-Salem, N. C., have helped a young colored man to start a school, a model black colony, and a farm. They have themselves subscribed generously, and have done all in their power to improve the blacks. When I was last in their beautiful city they told me that in that black community of hundreds of souls there had never been an arrest made or a legal paper served. That shows what can be done when Southern white men really take this negro problem in hand. Prof. Jerome Dowd, a professor in Trinity College, North Carolina, in an excellent article in the December Century, on "Paths of Hope for the Negro," says: "The field is broad enough for both races to attain all that is possible for them. In spite of the periodic political conflicts and occasional local riots and acts of individual violence, the relation between the races in respect to nine-tenths of the population are very friendly."

I have watched with great interest for the last ten years the labor problem being worked out near my home, in one of the largest shipyards in the world, where whites and blacks labor side by side. There have been fewer strikes and less labor trouble in that great yard, with its thousands of workmen, than in almost any yard of its size in the world. Instead of the blacks pulling down the wages of the whites, the wages paid to both are the highest in the market. In an undeveloped country like the South, which needs all the labor that it can possibly obtain, with vast tracts of land waiting to be cultivated, with untold resources of iron and coal to be developed, the last thing to be feared, it seems to me, is a race labor war. I have traveled largely in the South; I have talked with all classes of men. The one thing that faces planters and manufacturers is scarcity of labor. The planters tell me that their men are drawn off to the mines and the railroads. The wage of the laboring man, both white and black, is rising, and that means prosperity for both races, but especially for the white man.

The Hon. John Temple Graves pleads eloquently for the removal of the blacks. But whenever there is a hint of the removal of any of them there comes the loudest protest from every class in the community. Not long since a movement was made in one of the agricultural counties of Georgia to take away the blacks. The planters begged that the exodus be stopped, declaring that if it went on they would be ruined. A friend of mine tried to move a colony of blacks from Alabama and Mississippi to Mexico. He declared to me that the greatest difficulty he had to encounter was the opposition of the Southern white man. The truth is, people all over the world are turning their eyes continually toward the Southern negro laborer, realizing what many a Southern man has told me, that the blacks, when properly treated, are the best laborers in the world. Shrewd, long-headed Germany has asked Booker Washington to send some of his men to raise cotton in South Africa. In the December number of the International Monthly, Mr. Washington says that within the last two months he has received letters from the Sandwich Islands, Cuba, and South America asking that the American negro be induced to go to these places as laborers. In each case, as he says, there would seem to be an abundance of labor already in the places named. It is there, but it seems not to be of the quality and value of that of the negro in the United States.

In the testimony given recently before the United States Industrial Commission, again and again Southern white men have stated in the most emphatic language that the negro is the best laborer that the South has ever had, and is the best the South is likely to get in the future.

We have been hearing much of late to the effect that the negro is dying out, that he is thoroughly criminal, that education ruins him, and that he is altogether valueless as a laborer. The census seems to show that he has increased from four to nearly ten millions since the war, that he has accumulated nearly a billion

dollars' worth of property of his own, and that as a free laborer he raised four times as much cotton in 1899 as he did as a slave in 1850.

Is it quite just to say of this people that it "stands at the door of the South a criminal beggar?" It is not strange that in the demoralization following emancipation crime should have increased, that the negro should have often confused freedom with license and thought that it meant freedom from labor, that the negro father and mother should have had little idea of family life or of the proper way to train their children, but the suggestion that education is the cause of crime, or that an increase of intelligence in any part of the community is harmful is certainly not to be entertained in this home of Thomas Jefferson.

Mr. Washington has received from 300 prominent Southern white men answers to these questions:

1. Has education made the negro a more useful citizen?
2. Has it made him more economical and more inclined to acquire wealth?
3. Has it made him a more valuable workman, especially where thought and skill are required?

Nine-tenths answered all three questions emphatically in the affirmative. A few expressed doubt; only one answered no.

REPLY

By PAUL B. BARRINGER.

[By previous arrangement Dr. Dreher and Dr. Frissell replied to Dr. Barringer's paper, and in reply to Dr. Frissell's criticism of the words "criminal beggar," Dr. Barringer presented the following statements.]

A few years ago a balance sheet for the blacks and whites of Virginia stood as follows:

For negro criminal expenses	\$304,018
For negro education	324,364
For negro lunatics	80,000
Total negro expenses	608,382
Total negro taxes	103,565
Annual loss to Virginia on account of negro	504,817

The above report was made by the State auditor, and was quoted in Hofiman's *Race Traits and Tendencies*, page 301. It will be seen from it that the annual net loss on the negro population of this State (Virginia) is over a half a million of dollars, and that the total negro taxes paid is even less by \$100,000 than the sum annually expended by the whites to repress negro crime.

Secondly, Dr. Barringer called attention to the report of the Virginia Penitentiary for 1899, where there were among the State convicts only 404 whites as against 1,694 blacks, giving on the basis of population negro criminality as 7.4 times greater than the white. The latest reports of the State penitentiaries from Maryland to Texas show about the same results, rising to 9.4 and 8 in Georgia, where progressive municipal administration draws the negro to town, and falling as low as 5.4 in Mississippi, where the negroes live in the country, and where white domination and negro disfranchisement are most complete.

These facts, Dr. Barringer stated, warranted him in making this clear statement of the situation.

CHAPTER XIV.

GERMAN INSTRUCTION IN AMERICAN SCHOOLS.

By L. VIERECK,

Of New York, late Member of the German Reichstag.

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PREFACE.

The author of the following chapter published a number of articles on the subject in German and German-American journals during the years 1899 and 1900, which led to the present compilation. No one appreciates better than himself the imperfection of his work and its numerous deficiencies. Independently of the short time allowed him, he may offer in excuse the reason that no previous attempt had been made to present the subject as it is herein treated, so that comparatively few works are available for reference. No history has yet been undertaken which portrays the manifold influences during the past two hundred years of German thought on American civilization in general and on the formation of the whole educational system in particular. For Maryland and Pennsylvania these influences have been studied to some extent, but for all the other States but very little, if any, scattered material for reference exists, especially as

prominent American writers on the history of education in the several States have not as yet paid sufficient attention to the educational relations between the two great nations.

The best material is contained in a number of detached articles and addresses on the subject, mostly short, in more comprehensive works. The references in the text furnish the necessary information as to the sources made use of, though it may be stated in advance that much valuable information was obtained especially from the works of Hon. William T. Harris, United States Commissioner of Education; Hon. Andrew D. White, United States ambassador in Germany; the late Professors Seidensticker and Hinsdale, and School Superintendent Knortz. The following gentlemen, at present connected with the higher educational institutions of the country, sent excellent material, partly in manuscript, to the author: Professor Learned, University of Pennsylvania; Professors Carpenter and Thomas, of Columbia University; Professor Schoenfeld, Columbian University; Professors Kuno Francke and Hugo Münsterberg, Harvard University; Professor Gruener, Yale University; Professor Goebel, Stanford University; Professor Senger, University of California; Professor Keller, New York Normal College, and Director Dapprich, of the Normal Seminary in Milwaukee. The author extends his sincere thanks to these gentlemen for their kind assistance.

No historical sketch of the development of German instruction could have been attempted without a short reference to the relations between Germany and the United States, and the position of German-Americans toward Anglo-Americans. These relations influenced the organization of German instruction to a great extent, and also explain the favorable or retarding course of public opinion. At present the position of German in higher education and the recognition of German methods on the part of the scientists of America is so assured that, in future, patriotic benefactors need only occasionally promote the extension of German elementary instruction in the city district schools.

The efforts of the author will be amply rewarded if the subject treated receives, in the course of time, the attention heretofore unquestionably deserved but denied, and if a general knowledge of the educational relations between two of the most important and progressive nations of the whole world contributes toward bringing about permanently a better understanding between Americans and Germans.

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PART I.—HISTORICAL DEVELOPMENT.

The historical development of the study of German is easily divided into the three following epochs, distinguished by characteristic differences:

- I. From the beginning of the eighteenth century to the year 1825.
- II. From the year 1825 to the year 1876.
- III. From the year 1876 to the close of the century.

The first epoch is characterized by the parochial schools of the German colonists in the eighteenth century of the colonial period, by the "first travels of discovery" to Germany undertaken by wide-awake Americans either for the purpose of study or to learn the conditions of higher education in that country, and finally by the first modest efforts made in different colleges to introduce German, all of which, however, had but a transient effect.

The second epoch begins with the appointment of a German professor to the chair of modern languages in the newly founded University of Virginia and the important step of permitting Prof. Charles Follen to teach his mother tongue at Harvard. In the course of fifty years nearly 3,000,000 immigrants, among them thousands of men with an academic education, came into the country, using German as their language in social intercourse. Numerous German private schools were established in the different parts of the country, and German was introduced into the public schools of cities with a large German population at this time. The best higher educational institutions of the country began to include German as an optional study, after educated Americans had become acquainted with German educational methods, German literature, and German science, in part, indirectly from France through England. Such a condition of affairs was, in a great measure brought about by the circumstance that German high schools were attended longer and oftener by American students, who enthusiastically advocated educational reform based upon the German model.

The third epoch was inaugurated by the founding of the Johns Hopkins University, which, from the very beginning, has based its work upon German methods and given expression to the fact that the high educational value of the German language and literature is at present generally recognized. Not only have all universities since founded followed the example given in Baltimore, but older colleges are beginning their process of change in the same direction. For admission to the better colleges a certain knowledge of German has already begun to be required, and no academic degree is now conferred unless candidates are at least so well acquainted with German as to be able to understand, in the original, the German books and periodicals which they must study. This latest period of development is by no means concluded; it seems rather to be leading to

the general issue of raising German and German literature to an obligatory element of "college education," at the same time effecting the introduction of German into all preparatory schools without exception, since within recent years no one is admitted to a first-class college unless he possesses an elementary knowledge of German.

I. FROM THE BEGINNING OF THE EIGHTEENTH CENTURY TO 1835.

The German parochial schools in Pennsylvania, as well as those in North Carolina, Virginia, and other British colonies in which German colonists settled in large numbers in the eighteenth century, are about as old as the settlements themselves. Whether the immigrants called themselves Pietists, Mennonites, Dunkards, Moravians, German Quakers, members of the Reformed Church, Lutherans, or simply dissenters, and however great their differences of opinion in the interpretation of the Bible may have been, on one point at least they were united. They all believed with Martin Luther:

Burgomasters, princes, and nobles we can dispense with; schools can not be dispensed with, for they must govern the world.

The colonists not only thought so, but acted accordingly. As soon as a town was formed an immediate effort, as a rule, was made to establish a school. In fact, it is stated in regard to a Moravian settlement in North Carolina, that the founders of the colony considered it their duty to begin a building for church and school purposes before the homes of the colonists were finished. School attendance was always considered as serious a matter as the teaching of religion, which was combined with elementary instruction, so that German colonies thus paved the way for compulsory education.

American authors are prone to underrate these German pioneers, whom they unjustly regard as thoroughly rough and ignorant "German boors." However, what has been said should suffice to establish a better opinion of them. For the most part of course these colonists themselves had no higher education than what was to be acquired in the German village schools of that time. Therefore, as a rule, they brought over with them a man who, as minister and teacher, represented the movement of education. This union of personality of minister and teacher was due to the fact that formerly in Germany theologians were always required to pass the teachers' examination, because until the close of the eighteenth century, teachers, almost without exception, were ministers. When, in the beginning of the eighteenth century, the renowned German pedagogue, August Hermann Francke, established his first normal school in Halle, poor theological students, in return for board and lodging, at first taught secular studies under the direction and superintendence of school inspectors.¹

As the clerical teachers who emigrated to America were in the course of time followed by men who had enjoyed the benefit of higher education in Halle or at other German universities, the first parochial schools sometimes attained the level of passably good public schools, such as at that time were hardly to be found outside of New England, if anywhere. These schools were particularly important for the progress of culture in Pennsylvania, in which State the English Quakers did not possess the same deep appreciation for the necessity of public schools as did the Pilgrim Fathers, who established Harvard University at a time when the whole of Massachusetts contained not much over 5,000 inhabitants (1638).

According to the conscientious researches of Oswald Seidensticker, the first school established by German colonists in America was that of Germantown, which was regularly attended after the year 1702 by the children of the author of the text-book *Pastorius's Primer*. Germantown, the German city which now forms a part of Philadelphia—namely, the twenty-second ward—was founded in 1683 by

¹ Compare Paulsen's *History of Scientific Instruction*.

Francis Daniel Pastorius, the friend of William Penn. This man, who was a universal genius for his time, deserves the greater praise for the labor of teaching the children in his colony himself, as he was, undoubtedly, one of the busiest men of the period. He was at the same time teacher in the English Quaker school in Philadelphia, and burgomaster, judge, and teacher in Germantown. Besides, from 1683 till his death, which occurred on the 27th of December, 1719, he found time to write 43 different works. Among them are *Alvearium*, or *Bee-hive*, a kind of encyclopedia, containing over 5,000 articles on history, geography, literature, and church matters, which was designed to teach his pupils all the German learning that he himself had imbibed.

A most interesting illustration of the conception which the noble Pastorius himself had of his earthly mission to be the actual founder of German Americanism is found in the *Foundation and Daybook of Germantown*, kept by him while in office. It contains the following pathetic preface, written in Latin.

Hail! posterity, posterity in Germanopolis! Learn first of all from the contents of the following pages that your parents and forefathers left Germany, the fair land in which they were born and reared (oh, ye native hearths!), for voluntary exile, in order to pass the remainder of their lives in the wilds of Pennsylvania, in less anxious lonely isolation and in true German fashion; that is to say, like brothers. Learn, too, how painful it was to establish the German name in North America after crossing the Atlantic Ocean. And you, beloved generation of grandchildren, who were to me the paragons of right, imitate our example; but forgive us for swerving from the difficult path, which we willingly acknowledge to have done, and may the dangers that threatened others make you careful. Farewell, posterity! farewell, German nation of brothers! forever farewell!

When he wrote those words, the old student of Strassburg, Basle, and Jena must have borne the celebrated verse from the *Æneid* in mind:

Tantæ molis erat Romanam condere gentem.

It should never be forgotten that he established the "German-American" name a whole century before the thought was conceived of giving birth to a new American nation. To the German immigrants with an academic education he gave the example, so often followed since with more or less success, how to transmit the treasures of older German civilization to the younger shoots of the German nation, and how to convert them into active elements of the new American civilization. Pastorius rejected all pointless scholastic knowledge, and desired above all else to have such learning disseminated as would be profitable to the growing generation in their later pursuits in life.

I myself would give 100 rix-dollars at once [he said on one occasion] if I had devoted the valuable time spent in learning Sperling's physics, metaphysics, and other unnecessary sophistical argumentationibus and arguitionibus to engineering and printing, which would serve me better now and would be of more use and pleasure to me and my fellow-Christians than such physics, metaphysics, and all Aristotelian elenchi and syllogismi, by which no savage or heathen is led to God and much less a piece of bread is earned.

Pastorius attached great importance to the practice of teaching children English, the "country language," as well as German, the language of their former home. This policy has been pursued by all intelligent German-American teachers of later times. The Schwenkfeldians, for instance, who were among the best teachers of their times, published a school order in the year 1764 which contained the following article:

Concerning the useful sciences which, besides true knowledge and the fear of God, shall be taught to children in school, they must begin with reading and writing; as in Pennsylvania two languages, particularly, are spoken, children shall be thoroughly taught and informed in the said two languages, in speaking both as well as in reading and writing, as much and as far as is practicable.¹

¹ Accordingly, arithmetic, geography and, if possible, Latin were to be taught. Compare the account of Learned in *Americana Germanica*, II, No. 2, p. 74.

As early as the year 1706, the Mennonites founded the school at which Christopher Dock, the worthy successor of Pastorius, taught. He composed the celebrated school order which was published under the following title: "A simple and thoroughly prepared school order in which it is clearly defined in what way children are not only best trained in the studies usually taught in schools, but how they may be well instructed in righteousness; written out of love for humanity by Christopher Dock, an experienced teacher of long practice, and published by several friends of the common weal." Boone rates Dock's services so high as to consider him in a certain measure the German-American Pestalozzi.¹ Lutherans, as well as members of the Reformed Church, undoubtedly established schools before the year 1720, though definite facts can be traced only from 1720. Learned mentions, besides, the following German teachers during the period from 1720 to 1740:² John Phillip Brehm, of Whitpain, Montgomery County; George Michael Weiss, a graduate of Heidelberg University; George Stiefel, of Tulpehocken, Berks County; John Jacob Hock and Kaspar Leutbecker, of Tulpehocken. Men like Mühlenberg and Schlatter, who had been students at Francke's Paedagogium in Halle, came later, and improved the schools. The development of German literature produced in America, and including thousands of different prints, went hand in hand with this progress. The first Bible published in the New World appeared at that time in the German language, forty years before an English Bible was printed in America.³ The first printer who undertook to print German works in this country was, strange to say, no German but an American; none other than Benjamin Franklin. In 1730 he printed (in Roman characters) the oldest German-American book extant, or at least the oldest discovered until now.⁴ It was printed by order of the monastery of Ephrata, which established its own printing office in 1745, and bore the following bombastic title:

"Divine hymns of love and praise that together penetrated the hearts of the children of wisdom and again flowed out from them. Written out of heartfelt love for the praise of God and by those followers of divine wisdom for their regeneration and encouragement in their cross and sorrow. For to be filled with love gives God the highest praise and us the most beautiful inspirations of song. Printed in Philadelphia by Benjamin Franklin, Market street, 1730."

It is a duodecimo volume of 96 pages.⁵ Franklin afterwards printed a large number of German hymn books, prayer books, and text-books, records, and also a German catechism, until in 1738 Christopher Sauer, the father, and later on his son of the same name, instituted a competition in this line of business in Germantown. This was more keenly felt as, to advertise his undertaking, Sauer controlled a powerful agency, having founded the first German newspaper, called the "Hochdeutscher pennsylvanischer Geschichtsschreiber" (German Historical Record of Pennsylvania), which was afterwards changed to "Germantowner Zeitung" (the Germantown Paper). Nevertheless, Franklin printed a number of German books, among others, jointly with Böhm, in the year 1751, a splendid edition of "Arndt's True Christianity."

Seidensticker, in fact, asserts that Franklin himself was the editor of the first German-American newspaper. In his "German American Events, principally of Pennsylvania, up to 1870," we find the following apposite data:

1732. Benjamin Franklin proposes to issue, and probably issues, the Philadelphia Zeitung—first German paper in America.

¹ Boone, Education in the United States. Dock's life and services to pedagogics are given with more detail in Pennypacker's Historical Sketches.

² Americana Germanica, II, No. 2, p. 73.

³ Zimmermann, German in America, page xxiv.

⁴ Compare Seidensticker, German Day, 1892, page 12, and Zimmermann, German in America, page xx.

⁵ The only copy extant of this remarkable book is in possession of Mr. Abraham H. Cassel, Harleysville, Montgomery County, Pa.

1755. Under the auspices of the Charity School Society, Benjamin Franklin and Anton Armbrüster publish a German newspaper in Philadelphia.

Be it as it may, whether Franklin was not only a German-American printer, but also the first German-American journalist, it serves our present purpose only to prove the fact that one hundred and fifty years ago a man like Franklin paid the greatest attention to German and German literature; many other exceptionally convincing facts exist.

Charles Lee Smith estimates the number of German immigrants during the first half of the eighteenth century to have been only 30,000, of whom 18,000 settled in North Carolina.¹ There remained, then, only 12,000 persons for the other colonies, including New York (the foundation of Newburg on the Hudson) and Maine (the German settlement at Broad Bay), as objective points of a large number of immigrants since the years 1709 and 1740, respectively. That is manifestly much too low an estimate. In the year 1749 alone a German traveler by the name of Kaln saw 25 emigrant vessels, with 7,049 German emigrants aboard, arrive at Philadelphia. The authority accepted as most reliable on such questions, the celebrated German geographer, Christopher Daniel Ebeling, gives the population of Pennsylvania in the year 1755 as 200,000 souls, of whom the half came from Germany.² The governor of the colony, Thomas, was of the opinion that the German element formed even a larger proportion of the population, for in 1748 he wrote to the bishop of Exeter:

The Germans of that province are, I believe, three-fifths of the whole people, and by their industry and frugality have been the principal instruments of raising it to its present flourishing condition.

We understand from these opinions of Governor Thomas that he did not allow himself to be duped by the Nativists, but favored German immigration. His predecessor, Patrick Gordon, had in 1729 procured the passage of a law in the assembly of Pennsylvania providing that an entrance duty of 20 shillings should be paid for every Irish servant, as well as for all "redemptioners," 40 shillings for all other foreigners, and £5 for every negro. In 1730, however, these restrictions were revoked and such persons only excluded as were incompetent to work or might become a burden to the community for other reasons. Franklin, and all intelligent citizens with him, maintained the point of view that every further restriction upon immigration would be prejudicial. However, he advocated that all newcomers should be Americanized in an appropriate manner. The best means for this end, as most of the immigrants were Germans, was the introduction of German into American schools, and this measure was promptly adopted. Learned refers concisely to the matter in the following terms:³ "While the introduction of the charity or free school and the 'neighborhood school' naturally favored the study of English as the official speech of the province, yet German was retained in the course of study. And when the school extended its scope in the direction of the academy, the forerunner of the later college and university, German still found a place among the languages to be taught. Indeed it is not too much to say that German instruction has been kept up in Pennsylvania persistently from the days of Penn and Pastorius to the present time."

But if that could be proved as the course of educational development in this State for two hundred years, no one deserves a higher acknowledgment than Benjamin Franklin. Soon after settling in Philadelphia he founded the "Junto Club," which was incorporated in 1732, and enlarged to the "Philosophical Society of Philadelphia" in 1743. Again, in 1749, this society agitated the foundation of the "Public Academy of the city of Philadelphia," the same institution that, later on, developed into the present University of Pennsylvania.

¹ Compare "History of Education in North Carolina."

² In his celebrated work on the History and Geography of North America, Vol. IV p 203.

³ Compare *Americana Germanica*, II, No. 2, pp. 74 and 75.

This is the first American school into which German was introduced. Franklin designed its course of study and recommended instruction in French and German, besides the language of the country. This proposition was accepted. When, in 1753, the academy became a college, the trustees decided to appoint Mr. William Creamer as German professor. Mr. Creamer filled the position until 1775, and never had cause to complain of the want of pupils.

About this time an event occurred which, strange enough, seems to have escaped the notice of Franklin's biographers, but which is an eloquent testimony of the keen interest which this far-sighted man took in the educational system of Germany. Franklin's visit to Göttingen took place in August, 1766, and justly created a sensation in Germany. As far as we know, Benjamin Franklin was the first American who ever visited a German university.¹ He was permitted to attend a session of the Academy of Sciences and enjoyed the distinction in Göttingen due to his prominent position.

Hinsdale, who found out the fact himself and made it known to the American public, accompanies it with the following comment:

It is rather surprising to find that the man who is the best embodiment of the practical spirit of American philosophy should have been the first American to show an interest in the higher education of the land of abstract thought and science. It is surprising, also, to find that nearly all the facts which we possess relating to the visit are found in German authorities. In truth, I have never been able to find the slightest allusion to the visit either in Franklin's correspondence or in the leading biographies of him that have been published, although I have reason to think that some slight allusions are to be found in these sources.

After what has been said of Franklin as a German printer and publisher and his recommendation of the introduction of German into American schools, the reader will not be so surprised to hear of his interest in a German university, and especially the one which in consequence of the union of Hanover and England in the Guelph dynasty was, like Pennsylvania, under English rule. The opinion seems likewise justifiable that the transformation of the college in Philadelphia to the University of Pennsylvania, begun soon after Franklin's return from Germany, was in no small measure due to the account of the impressions which Franklin received in his "travel of discovery" to Göttingen.

But even if this opinion be untenable, the event is of great importance for American civilization, as such American travels of discovery were until then mostly a cause of wonder, somewhat like the expeditions for the exploration of the interior of Africa, or the discovery of the North Pole. The latter expeditions, however, were directed to savage or little civilized districts, whilst the former established the line of communication with a center of the highest civilization, and this connection was calculated to exert a most beneficial influence on the American mind, especially during the first half of the nineteenth century. Without Franklin, whose visit, we shall soon see, encouraged the first Pennsylvania students to attend Göttingen,² totally unknown in America at that time, there would have been no American "Göttingen men," who were so prominent in bringing on the final issue, and of whom the American ambassador in Berlin, Andrew D. White, spoke so admirably in his last Thanksgiving Day speech.³ Among other things, he said:

Although Great Britain is generally honored as the mother of the United States, Germany has, from an intellectual standpoint, become more and more the second mother of the United States. More than any other country, Germany has made the universities and colleges of America what they are to-day—a powerful force in the development of American civilization.

¹ Compare Hinsdale, *Foreign Influence upon Education*, in the Report of the Commissioner of Education for the year 1897-98, Vol. 1. The text of the detailed account of the visit can, of course, not be repeated here, but is to be recommended for close study.

² Compare Hinsdale, page 607.

³ According to the reports of both German and American newspapers.

A long time, it is true, was to intervene before German influence was felt, as Mr. White declared it has been. In the beginning it seemed almost as though it would take America by storm. According to the new charter of 1779 of the institute of Pennsylvania, the six chief churches in Philadelphia, namely, the Episcopal, the Presbyterian, the Baptist, the Lutheran, the German Calvinist, and the Roman Catholic, selected their own chapter among the three of which the board of trustees was composed. They appointed two of the most prominent German ministers of the city, John Christopher Kunze and Kaspar Weiberg, as trustees. Owing to the influence of these two men, the following remarkable resolution was passed on January 10, 1780: "A German professor of philosophy shall be appointed, whose duty it shall be to teach Latin and Greek by means of the German language in the academy as well as in the present university." One of the proposers of this measure, Kunze, considered the most eminent teacher of his time in America, was elected to fill the position and contemplated making the new university, to a certain extent, the "Göttingen" of America, which was to be the intermediary between German and American education.

Kunze, whose literary merit Learned has minutely discussed,¹ had made an attempt as early as 1773 to establish a kind of German "normal seminary." The following statement, written in a letter to a friend, is still in existence:

Since my stay in Klosterburg I have always felt a special desire to be connected with a school in which languages and the sciences would be taught. All my other affairs have done so little to repress this within me that, on the contrary, I have always rather entertained the thought sometime * * * to establish a like institute among the Germans here. * * * In the beginning of the new year 1773 a student of Halle came to us, who had given up law, become a soldier, and finally taught a long time in St. Thomas. He is looking for a position, and presented certificates from the University of Halle. * * * It seemed strange to me that the day before my candidate, Mr. Leps, was announced the thought came to me:² If I should ever come in possession of £20, I would buy the first German student who would land on these shores in debt for his passage, put him in my uppermost room, begin a small Latin school, teach myself during the morning hours, and then let my servant teach for me and charge a small tuition fee. * * *

Meanwhile Mr. Leps was not in debt, and, besides, had a small sum of money, sufficient to support him for a few months. I advised him to open a Latin school, promised to help him in the undertaking, and wrote out the following for him on a sheet of paper:

"A few promoters of the true welfare of the German nation in America contemplate forming a society to be entitled: 'The Society for the Promotion of Christianity and all Useful Knowledge among Germans in America.'"

The required 24 subscribers were found, each contributing £10 (\$50). These founders enjoyed free instruction; the others were obliged to pay. Three classes were formed, and the work was begun with energy. "This school," says Learned, "seems to represent the first attempt to introduce strictly academic instruction among the Germans in America, and transferred the influence of Francke's pedagogical institute in Halle to American soil."

The worth of this small private school, which proudly bore the title of "German seminary," has perhaps been overestimated, as Mr. Leps, the teacher, had received no seminary education himself; still the success of his first pedagogical effort encouraged Professor Kunze to further action in this direction. He was an influential member of the "German society," founded in 1764, for the protection of German immigrants, which applied to the assembly in 1780 or 1781 for a charter. In their petition the members, prompted by Kunze, declared:

That they contemplate extending their original institution, and applying a portion of the money in their hands and what would be received in the future to other charitable purposes, as, for instance, the instructing of poor children in German as well as in English, and in reading and writing, and obtaining for them the

¹ In his speech of March 21, 1896, at the dedication of the Bechstein library in Philadelphia.

² The following explains what was at that time understood by redemptioners; i. e., poor immigrants whose services were sold for a stipulated period to pay the expense of their passage.

instruction and education for which they may be best adapted, placing those who excel in the position to complete their studies at the university established in the city of Philadelphia; moreover, that they intend to found a library and, besides, do more that they can undertake with a charitable purpose, without prejudice to other residents of the State, for the help and welfare of their compatriots.

The charter granted more than these petitioners asked; it imposed the obligation on the society to attain these purposes by their action.¹

But excepting a few successful efforts nothing was achieved, on account of the same adversity of circumstances which, in the course of a few years, led to the decline of the "German Institute," the official name given to the "German division" established at the university under the auspices of Kunze. The "German Society" furnished the means for many students to study German and other scientific branches at the university. In the year 1784 Kunze accepted an invitation to the "Columbia University," in New York, where he was called to the chair of oriental languages, as at that time a German professor, John Daniel Gross, S. T. D., had already been appointed for the years 1784-1795.²

Reverend Justus Henry Christian Helmuth succeeded Kunze in Philadelphia, and was so decided upon promoting the study of German that he made a most earnest appeal to the "German Society" to give an annual prize, a gold medal, for the best composition on a given theme, allowing every lover of the German language in America and Europe to compete. The first theme was to be: "How can the preservation and extension of German in Pennsylvania be best effected?"

The petition received as little consideration as an article in the Philadelphia Correspondenz of 1787, which recommended the founding of public schools in which German should be taught. Helmuth enjoyed the satisfaction of seeing the "institute" decidedly prosperous under his direction. In his annual report for 1785 he could proudly assert the fact that the attendance of the "institute" had risen to 60. At the "actus oratorius" the young men acquitted themselves brilliantly in a number of German recitations, and in the representation of a scene in which several children from the country go to school and there, for the first time, learn something of the world in studying German. At the same time, the students were so well posted in current German literature that they were already acquainted with Lessing's "Nathan," for instance, which had appeared only in 1779. Perhaps the very circumstance that the "institute" was so prosperous exerted a prejudicial influence for the cause of German. In the year 1786 a number of German citizens of the State manifested opposition to the "institute" by founding "Franklin College." On the occasion of the one hundredth anniversary, in 1891, of the institution now known as Franklin Marshall College, Provost Pepper made the following most noteworthy statements concerning the participation of the aged Franklin in this undertaking:

For a long time he had taken great interest in the welfare of the Germans, who formed the bulk of the population in some parts of Pennsylvania. He aided in the establishment of schools for them, and served as a trustee of a society for the benefit of the poor among them, and in 1787, although in his eighty-first year, he was active in the promotion of the long-cherished scheme of founding a college for the education of young Germans. On March 10 of that year—1787—an act was passed by the assembly incorporating and endowing the German College and Charity School in the borough and county of Lancaster, in which act it is recited that "the college is established for the instruction of youth in the German, English, Latin, Greek, and other learned languages, in theology, and in the useful arts, sciences, and literature." The same act of incorporation states that, "from a profound respect for the talents, virtues, and services to mankind in general, but more especially to this country, of his excellency Benjamin Franklin, esq., president of

¹ Act of incorporation, page 8 in Seidensticker's History of the German Society in Pennsylvania, page 180.

² Columbia University Bulletin, March, 1897.

supreme executive council, the said college shall be, and hereby is, denominated Franklin College." Franklin was the largest contributor to its funds, giving of his moderate fortune the sum of \$1,000, which may be considered large for those days; and still more when, in the spring of 1787 the corner stone was to be laid in Lancaster, he underwent the pain and fatigue of a journey thither in order to perform that ceremony.

The long list of deeds by which Benjamin Franklin proved himself an excellent patriot and likewise a warm friend of the Germans closes in a brilliant climax by this undoubtedly authentic representation of his participation in the foundation of the first German college. Unfortunately, neither the zeal of Germans such as Helmuth, nor the commendable example of so eminent an American as Franklin, could delay the downfall of German in Pennsylvania for many years. As early as 1787 the German "institute," whose attendance had diminished to 6, was abolished; Professor Helmuth, however, was permitted to retain his position as professor of German.

The misfortune [Learned remarks on these events] did not lie in the founding of "Franklin College" by the Germans, but in the division of the forces in the State on the one hand, by the suppression of the prosperous German institute in Philadelphia on the other; by the premature formation of a German college in the central part of the State at a time when not sufficient interest was manifested for the support of German education in the country. If the German institute of the University of Pennsylvania had been continued a quarter of a century longer, and if "Franklin College" had been founded on ground thus prepared in consequence of a strong current of German culture setting toward Philadelphia, the history of both institutes, the "University of Pennsylvania," as well as "Franklin College," would have left decidedly more noticeable traces in the annals of the young Republic.

But, as matters took their course, neither "Franklin College" nor the "University" fulfilled their educational purposes. The so-promising cooperation of German and English civilization at the University of Pennsylvania during the time when Kunze and Helmuth taught there was suspended for nearly a century. The scion of German learning took root again in the cool soil of New England, and then only in the second half of the nineteenth century.

This first phase of the development of German instruction in America led to the attendance of the first American student at a German university—Benjamin Smith Barton. At the age of 21 he was a student at the university in Philadelphia, when the event occurred of Franklin's visit to his home—Lancaster—to lay the corner stone of Franklin College. Such an event was calculated to make a deep impression upon a highly gifted, intellectual, and industrious young man, and so he decided to spend a number of years in Europe to apply himself to the studies of medicine and the sciences. He studied in Edinburgh, London, and Göttingen. At the last-mentioned university he received the degree of doctor of medicine, in 1799. Returning to America, Dr. Barton occupied a prominent position in Philadelphia. Previous to his death, which occurred in the year 1815, he wrote a number of scientific works that have given him a place in the annals of American civilization.¹

One of the chief reasons why the influence of German civilization in America suddenly suffered so decided an interruption during the last quarter of the eighteenth century was the struggle for independence that continued for so many years, and, in fact, ceased only at the close of the war with England, in 1812. *Inter arma silent leges!* Even schools can seldom continue their peaceful work of civilization undisturbed. Many colleges, as the Columbia, in New York, from 1776 to 1784, were obliged to close their halls for a longer or shorter period, whilst others were altogether abolished. Kunze's German Seminary, of Philadelphia, was among the schools swept away by the storms of revolution, whereas the Ger-

¹ A sketch of Barton's life is contained in Vol. I of Appleton's *Cyclopedia of American Biography*. Hinsdale accords him the honor (*ibid.*, p. 607,) of being the first American to receive an academic degree at a German institution.

man College, of Lancaster, gradually sacrificed its character as a German educational institution par excellence.

Why German influence was so much less predominant in general after the peace of 1783 than the French, which then predominated for a long time, is easily explained by historical events. Lafayette and the French had taken just as active a part in the foundation of the republic as the 29,166 Hessian, Brunswick, and other German soldiers in opposition to it. The fact was not generally known that these tools of England were only the victims of degenerate petty despots who were forced to turn their arms against the Americans and even occasionally went over to their side. Readers are used in the schools of the present day which record only the fact that at that time German princes sold their soldiers in America in order to crush rising liberty there. Not one word, on the other hand, is mentioned concerning Frederick the Great's friendly attitude toward the young republic or the part which German-Americans have a right to claim in the patriotic events. For the sake of historical truth the fact should not be passed over in silence that American generals included men like the inspector-general of the Army, Baron von Steuben, General De Kalb, and General Nicholas Herkimer, the victor of Oriskany; moreover, Germans like Rev. Peter G. Mühlenberg, who formed an entirely German regiment, were found on the American side. George Bancroft and all other great American historians render full justice to the Germans, but the public at large are as ignorant of the conditions of the case as, presumably, even the educated are of Benjamin Franklin's attitude to the German nationality, as explained above.

Another reason why German influence declined during the last quarter of the 18th and during the first quarter of the 19th century was the decrease of the number of immigrants from German countries. According to the calculations of J. Blodget and the statements given in Seibert's statistical annals, the whole immigration during this time did not exceed 4,000 to 6,000 persons a year whenever the blockades of the harbors during the wars admitted of any maritime intercourse. Immigration to any great extent was resumed only in the year 1817. In that year there were 22,240 immigrants, among whom few Germans were to be found. At all events, in the year mentioned only 3,102 Germans and Swiss came to Pennsylvania, where, in the meantime, the exceedingly friendly attitude which Franklin had maintained had been laid aside, and, instead, measures had been taken that tended to a less considerate Americanization of German colonists. Thus, for instance, the attempt was made to oblige Germans to anglicize their family names, a proceeding that explains the fact that in the State which originally showed the largest percentage of German residents, German names are comparatively weakly represented, and that sometimes families which have good reason to be numbered among German Americans bear a name which gives no sign of a German origin, for instance, the Pennypacker family. The determination to require German immigrants against their will to relinquish at once their nationality, instead of assimilating them gradually in an appropriate way, has, fortunately, been now completely set aside. No one has opposed it more decidedly and instead emphatically recommended the introduction of German instruction in public schools than Dr. W. T. Harris, United States Commissioner of Education, in his lecture on "German Instruction in American schools and the national idiosyncracies of the Anglo-Saxons and the Germans," delivered in Cleveland, July 16, 1890. As the most noteworthy remarks of Dr. Harris have by no means become as well known as the interests of educational progress demand, a short extract from them will not be out of place here.

The speaker based the appropriateness of the introduction of German instruction in public schools on the fact that a large number of citizens who have come from Germany desire to have their children know their native language and

should find the best means of satisfying this just desire in the public schools of the country.

It will contribute to raise the number of German immigrants, and at the same time "Americanize" them, if they are taught in public schools to be imbued with the spirit of American institutions and to sympathize with them.

It is of the greatest importance that immigrants should be educated in the best institutions of the country and be "Americanized" in the spirit of our free intelligence; otherwise they will, most assuredly, be "Americanized" by the worst forms of our political corruption. That is the alternative before which we stand which leaves us no free choice. For if we do not "Americanize" our immigrants by giving them a part in the best accomplishments of our civilization and maintain an active intellectual intercourse with them, they will rather contribute to the degeneration of our community and, in this way, de-Americanize—or even directly undermine—our national life.

The author then referred to his own experiences while superintendent of schools in St. Louis, where he introduced German to the greatest extent, and closed the first part of his lecture with the following noteworthy remarks:

For a long time after immigration the immigrants keep a relation with their kindred in the mother country. Our population in the Northwestern States keeps up correspondence and recognizes the family ties that exist with the people in Great Britain and Ireland, Germany and the Atlantic States. No difficulty is experienced by the Anglo-American settler among us in this matter. But the German-American is obliged to learn two languages. For if his children learn English only, there must be a too sudden and abrupt breaking off the continuity of race and a consequent great evil wrought upon his character. The consciousness of the history of one's ancestry and the influences derived from communication with the oldest members of one's family are very potent in giving tone to the individuality of youth and ripening age. This continuity of history is a kind of solid, substantial ground for the individual, and from its soil spring up his self-respect and aspiration.

A class of immigrants who had no desire to preserve a relation with their family stock would bring calamity upon the community into which they come.

The best Germans in America have always manifested the highest degree of patriotism toward their adopted country. The Utopian idea of founding their own "state within the state" had comparatively few adherents, and these were soon converted to a sensible view by the logic of facts.¹ This is best shown by the distinguished German author, Julius Fröbel, who states in direct terms² that Anglo-American thought does and must ever exercise a governing influence on the development of the United States.

Now, by fusing itself with this ruling thought and exerting its own influence upon it, the German element can participate and continue to participate in the great advantages of the extraordinary results of American civilization. The German spirit in America can receive its just due only by fusion with the American. For it is inherent in the nature of idealism that it can only be effective in the world through realism.

Those who landed in America with the chimerical notion of founding a distinct German community built, for instance, the cities of Hermann, in Missouri (1837), New Braunfels, in Texas (1839), and New Ulm, in Minnesota (1855), all of which have become flourishing centers of American civilization. The citizens of this country who have emigrated from Germany have fully understood that they have become Americans, and must allow that fact preeminence in deciding their attitude toward any question affecting the public good of America. They have an excellent example for their course of action in the French Huguenots who emigrated to Germany centuries ago, and have clung as tenaciously to their mother tongue as to their religion. As many bloody conflicts have since been fought between the two neighboring nations, these "refugees" have never allowed them-

¹ The political Utopias of German missionaries are briefly sketched in a comprehensive work in *Americana Germanica*, Vol. I, part 2, by Dr. T. S. Baker.

² Julius Fröbel, *German Emigration*, page 123.

selves to be surpassed in patriotism even by those Germans whose forefathers may have fought against the Romans in the Teutoburgerwald.

The patriotism of German-Americans was proved beyond a doubt during the critical times of the Revolution. Michael Hillegas¹ (of German parentage) was the first treasurer of the United Colonies in 1775, and subsequently of the United States until 1787. F. A. Mühlenberg was in 1787 president of the Pennsylvania convention that ratified the Constitution, and in 1789 was Speaker of the First Congress. Thus, the Germans played a conspicuous part in the development of public law in the Republic. In all probability no blame attaches to them for the failure of the ingenious plan of George Washington to organize education for the sake of the Union and for this purpose to found a national university in the Federal city, "embracing all the advantages of European tuition."² As we have seen, they attached the greatest importance to the education of the people, and were willing to erect the proud structure of liberty upon this rock.

After the favorable opportunity of making the education of the people a national affair had thus been missed, the separate States were compelled to give their attention to retrieve at once what the colonial governments for the most part had neglected. The proceedings in Virginia in this regard are of particular interest. William and Mary College, the second oldest in the country, had been in existence since 1693. Influenced, probably, by the circumstance that relations with Europe were becoming constantly more active, it had introduced instruction in French at an early period. Thomas Jefferson, who, as we know, spent some time in Paris, supported the plan of Chevalier Quesnay de Beaurepaire to establish a "French academy of the arts and sciences" in Richmond, with branches in New York, Philadelphia, and Baltimore. When this undertaking failed for want of capital, he for a time cherished the odd idea "of removing bodily to Virginia the entire faculty of the Swiss College of Geneva, which was thoroughly French in its form of culture." This proposition, however, met with little response from the practical Americans. European institutions can not be directly transplanted to America. They only belong there if, and in so far as, they can be adapted to the totally dissimilar American conditions. Had the idea been realized, it would surely have helped to broaden the gulf that later on separated the North and the South. One of the most prominent of Jefferson's biographers pertinently remarks concerning this incident: "Nothing is so enduring when once established as forms of culture. If French ideas had really penetrated Virginian society they would have become as dominant in the South as German ideas are now becoming in the State universities and school systems of the Northwest." The penetration of the great statesman was manifested in that he clearly discerned one of the main deficiencies of American education, that the habit of speaking the modern languages cannot be well acquired in America.³ We shall see later on that by the foundation of the State University of Virginia he found the right way to supply the deficiency, at least for Virginia. To estimate his other extraordinary services to American education would be out of place here. To follow the development of education in the separate States would also lead us beyond our intended scope.

There is not the slightest doubt but that the proceedings in Massachusetts, particularly at Harvard College, were of the very greatest importance for the subsequent definite introduction of German into the curriculum of American schools. At a time when German parochial schools were just beginning to be called into existence in Pennsylvania, Cotton Mather had already placed himself in direct communication with Professor Francke, in Halle, and conducted a regular cor-

¹ German-American Events, page 19.

² Compare Charles Kendall Adams, *Washington and the Higher Education*, Ithaca, N. Y., 1888.

³ Compare Hinsdale's article on "Education in the United States," in the *New American Supplement* of the latest edition of the *Encyclopædia Britannica*, Vol. II, page 1118.

respondence with him during the years 1709 to 1724.¹ A result of this intercourse was that Mather published a comprehensive account of Francke's works, and that New England theologians consequently showed themselves favorably inclined toward German ideas. It would require a whole volume, Hinsdale asserts, to give an exhaustive account of the influence of German studies upon American theology.² For the purpose of this review it is sufficient to state that these men were obliged to acquire the knowledge of German. Naturally, this reacted upon all those who were influenced by these pioneers of the study of German. Thus, Prof. Moses Stuart brought over German theology and philology to Andover. James Marsh, born in Vermont in 1794, and president of the University of Vermont, was one of his pupils. It was he who became acquainted with Kant's *Critique of Pure Reason*, and brought the first knowledge of it into America. Through his influence the "Coleridgians" became acquainted with each other.³ By this term the disciples of Coleridge are meant. Since 1780 it had been the custom for the most prominent English authors to make a trip to Germany, visit Goethe, and then try to make the treasures of German classic literature accessible to their compatriots. Among them were William Taylor, of Norwich, Wordsworth, Coleridge, Walter Scott, and Carlyle. However, their influence was probably greater over the inquisitive American mind than over their own compatriots, since from that time a steadily increasing interest in German literature and science was manifest. Owing to this interest, Edward Everett and George Ticknor became the first two New England students of Göttingen, which they attended from 1815 to 1817. The latter himself states that his motives for going were suggested by the reading of Mme. de Staël's celebrated book on Germany, a pamphlet on Göttingen, and the verbal accounts of an Englishman.⁴

In consequence of increased intercourse, the channels through which German influence made itself felt were manifold. Ticknor's account of the difficulties which he was required to overcome to gain the necessary rudimentary knowledge are highly interesting. He relates the following:

The first intimation I ever had on the subject was from Mme. de Staël's work on Germany, then just published. My next came from a pamphlet, published by Villers, to defend the University of Göttingen from the ill intentions of Jerome Bonaparte, the King of Westphalia, in which he gave a sketch of the university and its courses of study. My astonishment at these revelations was increased by an account of its library, given by an Englishman who had been at Göttingen, to my friend, the Rev. Samuel C. Thacher. I was sure that I should like to study at such a university, but it was in vain that I endeavored to get further knowledge upon the subject. I would gladly have prepared for it by learning the language I should have to use there, but there was no one in Boston who could teach me.

At Jamaica Plain there was a Dr. Brosius, a native of Strasburg, who gave instruction in mathematics. He was willing to do what he could for me in German, but he warned me that his pronunciation was very bad, as was that of all Alsace, which had become a part of France. Nor was it possible to get books. I borrowed a Meidinger's Grammar, French and German, from my friend Mr. Everett, and sent to New Hampshire, where I knew there was a German dictionary, and procured it. I also obtained a copy of Goethe's *Werther* in German (through Mr. William S. Shaw's connivance) from among Mr. J. Q. Adams's books, deposited by him on going to Europe in the *Athenæum*, under Mr. Shaw's care, but without giving him permission to lend them. I got so far as to write a translation of *Werther*, but no further.

The result of Everett's and Ticknor's stay at Göttingen was that the former prevailed upon President Kirkland to grant George Bancroft a scholarship for Göttingen. He studied there from 1818 to 1820, and was about the most successful of all who ever attended the university. On his return he wanted to teach history at

¹ Harvard Studies in Philology and Literature, Vol. V.

² Report of the Commissioner of Education for the year 1897-98, Vol. 1, page 627.

³ *Ibid.*, page 613.

⁴ *Ibid.*, page 608.

his first alma mater as a "lecturer," but could not carry out his intention. He therefore united himself with his fellow-student at Göttingen, Dr. Joseph Green Cogswell, to establish an educational institution after the model of the German gymnasium, in Northampton, Mass. In the "Round Hill School" attention was not given to the memorizing of facts, but to the development of the critical powers of pupils. From 1823 to 1831 the school was attended by 293 pupils, who came from 19 separate States and 4 foreign countries. All received instruction in German. The institution prospered, but not for any great length of time, having been discontinued in 1839. The Gymnasium, conducted by the brothers Henry E. and Sereno Dwight in New Haven from 1828 to 1831, met a similar fate. Nevertheless, the book written by the former and entitled "Travels in the north of Germany in the years 1825-1826," which contained a complete description of German life, and especially of education, had a wide circulation, and advocated the introduction of German methods of instruction.

In the meantime New York had likewise begun to be interested in the German educational reform. An eminent teacher, John Griscom, had spent the years 1818 and 1819 in Europe, become acquainted with Pestalozzi, and was enthusiastic over the institution conducted by Fellenberg according to Pestalozzi's ideas in Hofwyl, near Bern. This was the same place that gave Friedrich Fröbel his suggestions for his "kindergartens." Griscom remarks on this institution, "I can not but cherish the hope that this scheme of education, of combining agricultural and mechanical with literary and scientific instruction, will be speedily and extensively adopted in the United States." His own subsequent attempt to establish a similar institution failed, but nevertheless his work was not vain. Such was the opinion of Dr. Barnard, the celebrated American educator, who states, in reference to Griscom's report, which appeared in two volumes under the title "A year in Europe," that "no other book of the first half of the nineteenth century exerted so powerful an influence on the development of our educational system." Ex-President Thomas Jefferson confirmed this opinion, with the further comment that in organizing the University of Virginia he had, so far as it was practicable, followed the suggestions given therein.

In 1819 the plan of Jefferson was approved by the legislature of Virginia.

In one point [he wrote on this subject to Ticknor, in Cambridge¹] we shall depart from the usual custom that has been adopted by almost every college and academy in the United States. Restricting students to certain branches, the obligation of following exclusively those studies that will qualify them for special pursuits selected by them will not be carried through. On the contrary, we shall allow students the full liberty of attending all lectures which they may desire to hear, and shall require nothing more than the necessary preparatory education and the necessary age.

Ticknor himself was to be the soul of the new institution, and was invited to accept the chair of modern languages, with the guaranteed salary of \$2,500—a large amount for those times. He declined, however, though he considered Jefferson's plans very good. His views coincided with those expressed by his colleague, Professor, afterwards President, Everett, of Harvard, in his critique of Jefferson's new institution:² "We highly approve the professorship of the modern languages, and would wish to see this example followed by such of our universities as have not already made provision for them."

By this declaration, which may be considered the programme of the second epoch of the development of German instruction, Everett proves conclusively that, as an educator, he was abreast of his times, or rather, as Eliot says, in advance of them. Everett had, besides, brought a large number of German books from Göttingen, which formed the foundation of a German library for Harvard. In 1818

¹ Jefferson's Works, VIII, p. 300.

² North American Review for January, 1820.

this collection was considerably increased by the acquisition of Professor Ebeling's library in Hamburg, which this eminent geographer had been collecting for fifty years and which was purchased by a resident of Boston by the name of Thorndike. Ebeling had undoubtedly written the best work on American history and geography, and had received the thanks of the members of Congress officially.¹

It created a great sensation, both in the Old and the New World, that a Yankee should have carried off Ebeling's library before the King of Prussia. This incident must have had some influence on the great master, Goethe, who was very much pleased that all American students at Göttingen hurried to Weimar to pay him their respects personally. These circumstances, perhaps, afford the key to the extremely interesting fact that he should have felt called upon to present a set of his works in 30 volumes to the Harvard library. These books bear the inscription: "Gifts of the author, J. W. von Goethe, of Germany," to which is added the following translation of the original letter accompanying them:

The above poetical and scientific works are presented to the library of the university at Cambridge, in New England, as a mark of deep interest in its high literary character and in the successful zeal it has displayed through so long a course of years for the promotion of solid and elegant education.

With the high respects of the author.

J. W. VON GOETHE.

WEIMAR, August 11, 1819.

II. FROM 1825 TO 1876.

Alexander von Humboldt ranks first among the illustrious visitors who came to America in the beginning of the nineteenth century. In 1804, he finished his work in Central America, for which he was commissioned by the Spanish Government, and went to Washington as the guest of Thomas Jefferson. As subsequently an uninterrupted correspondence and exchange of books took place between these two prominent men, we may suppose that this intercourse furnished one of the reasons that determined Jefferson to establish, instead of a French academy, a "State university," at which German was taught from the very beginning. In his report to the legislature of the year 1818, the introduction of German into the curriculum of the institute is recommended in the following terms:²

The German now stands in a line with that of the most learned nations in richness of condition and advance in the sciences. It is, too, of common descent with the language of our own country, a branch of the same original Gothic stock, and furnishes valuable illustrations for us.

At the opening of the institution in the year 1825, a division for modern languages was at once established; 64 of the total number of students (116) with which the university began its work took German from the beginning. In 1854-55 the division numbered an attendance of 200. In 1859 the knowledge of German and French was made obligatory for the degree of Master of Arts created in 1831, and the same rule has obtained since then.

The first "professor of modern languages," who filled the position from 1825 to 1840, was Dr. Blättermann, a German. It seems, however, that in the same way and for the same reasons his life was made as hard as that of Francis Lieber, at South Carolina College.³

¹ Christopher Daniel Ebeling, born 1741, died June 30, 1817, published his above-mentioned celebrated History and Geography of North America, in seven volumes, during the years 1796 to 1816. He collected about 4,000 books on America, besides many smaller publications and a large number of charts. Though we look for his name in vain in Brockhaus or Meyer, and even in the German-American Conversations-Lexicon, we find him mentioned in the American Cyclopaedia, Vol. VI, p. 383. In the earlier numbers of the North American Review frequent reference is made to Ebeling, and the acquisition of his library, of which Thorndike gained possession, though his competitor was King Frederick William III of Prussia, is discussed at length.

² Compare John C. Henderson, Thomas Jefferson's Views on Public Education, pp. 200, 201.

³ Compare American Contributions, p. 114.

As much as it may always redound to the fame of the University of Virginia to have been the first to give German instruction a permanent introduction, this fact was, nevertheless, much less important for the progress of the study than the corresponding step taken at Harvard, likewise in the year 1825. Since the conclusion of peace, owing to the increased intercourse between the Old and the New World, the necessity of studying modern languages was felt more than ever in the north-eastern part of the Union. As James Russell Lowell remarked upon one occasion, "The modern languages were not deemed worthy to be taught, except as a social accomplishment or as a commercial subsidiary." In most instances French humbugs à la Riccaut de la Marlinière were alone accessible, who attempted to teach without being at all prepared for the profession, and became dancing masters if they did not succeed in teaching French. Bad experiences, such as, for instance, that of Amherst College in the years 1827 and 1828, with such an ignorant professor, were a very great drawback to the introduction of modern languages.

As we have learned, Everett and Ticknor long since desired to have German instruction and German methods introduced into Harvard. Jefferson's bold action in Virginia strengthened their opinions and led them also to act at the earliest opportunity. Just at the right time two men arrived in the country whose action was to bear far-reaching consequences. These were Dr. Charles Follen, who also adopted his Latin family name, Follenius, and Dr. Charles Beck. Both were German political refugees, and possessed excellent credentials from Lafayette, when they landed in New York on Christmas Day in 1824. Called to Round Hill school by Bancroft and Cogswell, they were soon connected with Cambridge. In the autumn of 1825 Follen was called to Harvard as professor of church history and ethics¹, and the arrangement was made allowing him, by way of experiment, to form a German class. In his *Harvard Reminiscences* Dr. A. T. Peabody speaks of this memorable event in the following words, that have not lost their interest:

German had never been taught in college before, and it was with no little difficulty that a volunteer class of eight was formed. I was one of that class. We were looked upon with very much the amazement with which a class in some obscure tribal dialect of the remotest Orient would be now regarded. We knew of but two or three persons in New England who could read German, though there were probably many more of whom we did not know. There were no German books in the bookstores. A friend gave me a copy of Schiller's "Wallenstein," which I read as soon as I was able to do so, and then passed it from hand to hand among those who could obtain nothing else to read. There was no attainable class book that could be used as a "reader." A few copies of Nöhdén's Grammar were imported, and a few copies of I forget whose "pocket dictionary," fortunately too copious for an Anglo-Saxon pocket, and suggesting the generous amplitude of the Low Dutch costume, as described in Irving's mythical "History of New York." The German Reader for Beginners, compiled by our teacher, was furnished to the class in single sheets as it was needed, and was printed in Roman type, there being no German type within easy reach. There could not have been a happier introduction to German literature than this little volume. It contained choice extracts in prose, all from writers that still hold an unchallenged place in the hierarchy of genius, and poems from Schiller, Goethe, Herder, and several other poets of kindred, if inferior, fame. But in the entire volume Dr. Follen rejoiced especially in several battle poems from Körner, the soldier and martyr of liberty. I never have heard recitations which impressed me so strongly as the reading of those pieces by Dr. Follen, who would put into them all of the heart and soul that had made him too much a lover of his country to be suffered to dwell in it. He appended to the other poems in the first edition of the reader, anonymously, a death song in memory of Körner, which we all knew to be his own, and which we read so often and so feelingly that it sank indelibly into permanent memory, and I find that, after an interval of sixty years, it is as fresh in my recollection as the hymns that I learned in my childhood.

In this account, unusual in its grasp of the subject, one thought strikes us, namely, the reported deficiency of German books, of which the university library

¹ I have not been able to find any other reference to this professorship than the mention made of it by Metzner in the *Yearbook of German-American Athletics*, Vol. I, No. 1, p. 10.

must have possessed thousands at that time. Of course we do not, on that account, lose interest in Peabody's report, which testifies that there have been enthusiastic American students at all times.

Follen continued to work with the same zeal that he manifested in his first course. The consequence was that he gained recognition for German instruction in America, whilst he himself was called to a chair of German language and literature in September, 1831. He entered upon this position with a speech on "The importance of the study of German and German literature," in which he said:

The treasures that are contained in German books no longer escape the attention of the public; the same intelligent interest is manifested toward them as toward all else that tends to enrich knowledge and strengthen the intellect. At this university, where formerly German literature was included under the rubric "non leguntur" (i. e., "is not read"), the library has been recently increased by a considerable number of valuable German works. The university itself prints books in German characters, and the number of those who are studying German averages 50 for each session. Moreover, there are now German teachers and German books in all important cities of this country, whereas, I have been assured, fifty years since, not a single German grammar or dictionary could be found in Boston. Many present residents can not only speak German, but read German works with a full understanding of their meaning. Many German classics have found their way into private libraries.

This great progress occurred in the short space of time between the years 1825 and 1831, during which the influence of Follen, and (after 1827) of Francis Lieber on the mind of the American Athens was felt. These men did not confine themselves to the intellect, but also gave their attention to the physical development of youth. They were the first to introduce instruction in gymnastics and swimming. Lieber's Boston swimming school made such a sensation that even the President of the United States went to see it.

Follen acted officially as "German professor" only five years. In 1833 he published an appeal to the American nation against slavery, for which he was greatly censured. The press reproached him with "being a fugitive enjoying American hospitality," for whom, to say the least, it was out of place to throw a firebrand into the social life of his new home. In being an abolitionist, however, Follen acted in perfect accord with all German-American traditions. As far back as April 18, 1688, the German Quakers of Germantown had issued a protest against traffic in human flesh.¹ But his aggressive attitude seemed to make continuance in office impossible.²

Fortunately, however, the stone once set in motion could not be kept from rolling. As early as 1838, Longfellow began his celebrated lectures on Goethe's Faust, in consequence of which educated Americans of to-day are thoroughly conversant with "Faust," and some even take an active part in researches relating to that work. Even before Longfellow, Alexander Hill Everett, in his "Europe," published in 1822, had referred to German literature and had written, particularly upon Schiller, a fiery criticism in the *North American Review*.

An intimate knowledge of German classic literature, until then known only in English translation, was speedily recognized by practical Americans to be the main purpose of the study of German. As Professor Learned states in a recent lecture,³ the study of German literature animated the great active period of American literature represented by the names of Longfellow, Emerson, Margaret Fuller, and the so-called transcendentalists. He says:

They all drew either indirectly through Carlyle or directly from the German source, and created in prose or metrical form a truly beautiful American national

¹ Compare Seidensticker's *The First German Immigrants in America*, page 80.

² Compare Metzner, *ibid.*, page 14.

³ The lecture referred to was delivered in German before the *Deutschen Verein* of Columbia, and was published in the *Pedagogical Monthly*.

literature, such as no subsequent period has ever again attained. Longfellow, as mediator of German poetry, in beautiful, pure, poetical form, still occupies the highest rank among our poets, and just where Americans recognize the great poet in the "Golden Legend" he is a worthy imitator and interpreter of the master Goethe. His entire conception of the Christ trilogy is Goethe's, and purely German, although he took the matter partly from American life. What would Emerson have been without Kant, the transcendentalists, Margaret Fuller, the other Concord poets, and the visionaries of Brook Farm without this German impulse? It was cultural history that gave the great philosopher-essayist Emerson a German disciple like Hermann Grimm. From William E. Channing to James Russell Lowell, German influence on our literature is unmistakable, and whether consciously or unconsciously, our greatest poets have thought and written under this influence. Whenever a return to purely English models has taken place, the want of creative power, poetical depth, and culture-historical understanding is manifest.

In this period of German force in New England we find the beginnings of Germanic ties, from which have proceeded, directly or indirectly, our historical writings, our later academic education, our gymnastics, our music, in part our desire of investigation in natural science, our liberal tendency in theology and religion, and particularly the so-called "new criticism" in our philosophy, and, to a great extent, our fine literature and rising literary criticism. From this time Germany was a new Athens for educated Americans, and the stream of American students to Germany increased from year to year.

Strange to say, the July revolution in France, through the following remarkable concatenation of circumstances, is one of the factors that strengthened German influence on American civilization. In May, 1831, the French Government sent the celebrated student and philosopher Victor Cousin to Germany to study the educational system of that country. The result of his observations is given in the masterly conceived work in two volumes entitled: *Rapport de l'Instruction Publique dans quelques Pays de l'Allemagne et Particulièrement en Prusse* (Report on Public Instruction in Some of the Countries of Germany, especially Prussia). Cousin began his travels in Frankfort-on-the-Main and subsequently visited Schulpforta, Saxe-Weimar, and the Kingdom of Saxony. Two-thirds of the whole work, however, are devoted to Prussia. Cousin was particularly impressed by the general observance of compulsory education wherever he went, even in the smallest villages.

He pertinently observes that in all questions of civilization national antipathies are prejudicial, and that the true greatness of a nation does not consist in proudly ignoring the achievements of others, but rather in turning to the best account what progress has been made in others, without being afraid of undermining thereby individual patriotism.

This report made a great sensation, first in England, where attention was drawn to it by the *Edinburgh Review*, and where a translation of the part relative to Prussia was published in London in 1834 through the efforts of Mrs. Sarah Austin. In America the demand for this translation was so great that the firm Wiley & Long, in New York, published an edition. This literary event was of paramount importance for the organization of the entire educational system of the West.

Just at the time when Cousin's report was agitating the minds of educated men, matters had progressed so far in Michigan that the organization of the educational system was contemplated. For this purpose a highly-gifted, eccentric, elderly man, Judge Woodward, had years before planned a system, original throughout, even to its nomenclature, according to which the State was to organize instruction.¹ A division was to be arranged into special faculties according to the Epis-

¹ Unfortunately, we have not the space to give any of the interesting details of the celebrated "Catholepistemiad." They can be obtained from the different publications of the University of Michigan, as Woodward desired the institution to be called. See also History of Higher Education in Michigan, Circular of Information No. 4, 1891, of the U. S. Bureau of Education.

temic system. Thus the German thought of a state university had already taken root, and Rev. John D. Pierce, whose duty it was as State school superintendent to plan the institution, expressed his purpose to adapt the Prussian system, as portrayed by Cousin, to the West.

A competent judge thus expresses himself:¹

A university in the German sense—an institution crowning the educational system of a state, treating its students as free adults engaged in a bona fide pursuit of knowledge, offering its advantages at the lowest possible prices, sending down its roots into the life of the people to take thence the sap of its own vitality and paying back the debt by raising the intelligence and adding to the value and the dignity of life throughout the entire commonwealth—a university upon this theory was as yet an experiment to be tried. That the experiment came to be tried in Michigan, under reasonably favorable conditions, is largely due to Mr. Pierce, whose office was modeled after that of the Prussian minister of public instruction, and who is said to have been the first American to hold such a position under a State government.

Unfortunately, the task was not by any means completed with the establishment of a "board of instruction" and a "university." On the contrary, the extremely painful work of creating a solid foundation, such as German universities possessed in the gymnasia, and Eastern colleges partly in academies, had to be undertaken. In this direction a system of high schools was established for Michigan, whose pupils, after completing the school studies, were to be qualified to enter the State University without examination after the year 1870. This latter arrangement has not been the least instrumental in acquiring for the State a reputation for possessing such an excellent school system as few other States in the whole Union can show. As a matter of course, the study of modern languages, and particularly German, receives its full due. In the middle of the century President Henry T. Tappan was able to introduce, besides the classic degree of bachelor of arts, the equally meritorious academic degree of bachelor of science, for which two modern languages were equivalent to Latin and Greek. No special "scientific schools" were erected for these "modern" students, as in the great Eastern colleges; but all students were brought together in the closest possible relations, in order to develop among them the proper "esprit du corps."

Tappan aimed to make the institution, as soon as he had taken charge of it, as much like a German university as possible. For this reason he abolished the regulation of distributing the positions equally among the different denominations, and made the effort to get the very best teachers. Persons, and not buildings, he considered the chief matter of value for universities. He called Andrew D. White to the chair of history and English literature; the astronomer Brunnnow, one of Encke's best pupils from Berlin, to the direction of the observatory, and Henry T. Frieze to the professorship of the dead languages. His successors, Dr. E. O. Haven (1863-69) and J. B. Angell (since 1871), have followed in his footsteps, and thus brought the institution to its present honored position.

Professor Hinsdale, who occupied the chair of pedagogics at this university, sums up its significance for the whole educational system of America in the following words:

The University of Michigan has been the type to which all the really vigorous and subsequent State universities have conformed more or less closely. Reference has once been made to the State universities as introducing a secular factor into the higher education. This fact, together with the possession of comparatively large resources, has given these institutions an influence in many of the Western States that has been very powerful, if not controlling.

The guiding influence of the University of Ann Arbor can hardly be better characterized than by saying that it opened German ideas in general and the study of German in particular to the whole West. The increase in ocean travel and the

¹ Calvin Thomas, *The University of Michigan and Its Recent Jubilee*.

growth of German immigration to giant proportions at the close of the German revolution of 1848 contributed to this result to an extraordinary degree. During the half century in question, between two and one-half and three millions of German immigrants must have landed. The majority of these traveled to the middle part of the West, where, in Ohio, Indiana, Missouri, Kentucky, Illinois, Minnesota, Wisconsin, and Michigan numerous German colonists settled. As this new national element was, for the most part, resolved to adhere to its mother tongue, and, if possible, to found strictly German colonies, many German society or private schools were founded which, in contrast to the still existing and newly established German parochial schools, bore no religious character. How well defined the movement was among the immigrants to found German schools twelve years before the tide of the "immigrants of 48" (*Achtundvierziger*), is best manifested by the fact that in October, 1837, a German convention¹ was held in Harrisburg, composed of delegates from six different States. It was agreed to demand the recognition of German as a second State language next to English, and to found a German normal school for the strengthening of existing German schools, as well as of those to be founded. Collections of money were taken up that amounted to enough to establish the normal school in 1838 in Philipsburg. Subsequently, interest flagged to such an extent that it was forced to close in 1840.

In the meantime the abnormal condition had developed in Ohio that in the larger cities there was a greater attendance at German private schools than at the different public schools. In the year 1831 in Cincinnati only 400 children received instruction in the city schools, whereas the attendance at German schools numbered 1,500. This condition lasted a number of years, and was the worse, as the public schools were decidedly inferior to the private. Thus in 1835 an excellent German educator, Dr. Frederick Rölker, resigned from his position in the city schools to accept that of superintendent in the newly founded Catholic elementary school, for the sole reason that the latter "promised to be decidedly better than the city schools, and he was not so handicapped in developing it into a perfect elementary school, according to the German, i. e., Prussian, system, by the depressing mechanism and manner of instruction that obtained in the city schools."²

In 1836 the German Protestants of Cincinnati founded a "German Immigrant School," later on incorporated by the State, in which the chief positions were filled by three excellent teachers educated in Germany—Edward Solomon, from Erfurt, Julius Weyse, and Julius Schwarz, the son of a professor at Heidelberg. This school was under the patronage of the "Lane Seminary" in Cincinnati, at which a prominent American teacher, Calvin E. Stowe, who afterwards married the authoress of "Uncle Tom's Cabin," was appointed professor.³ What he saw proved to him beyond a doubt that radical measures were necessary to remedy the deplorable condition of public schools in Ohio.

In January, 1836, Stowe took part in a convention of "professional teachers and school advocates" of the West, held in Columbus, Ohio, and before which he delivered a lecture on the subject, "The Prussian system of public instruction and its applicability to the United States."

Like a newly announced gospel, this lecture attracted so great attention in the whole country that the then governor of the State of Ohio sent it with a message, February 4, 1836, to the legislature then in session, which resolved to print it. Governor Lucas was subsequently commissioned by the legislature to send Professor Stowe to Europe, as a representative of the State of Ohio, to study the

¹ Compare Schem's German-American Conversations-Lexicon, XI, p. 284.

² Compare The German Pioneer, Vol. XIV, p. 3.

³ The account of conditions in Ohio is taken from the excellent writings of H. A. Rattermann, especially from the article on German influence on the organization and development of American schools. If more of such works of reference had been available, this account could have been made more complete.

school systems of the different countries and to report on them. Professor Stowe left for Europe in March, 1836, made a careful study of the educational systems of England, Scotland, France, The Netherlands, Germany (especially Prussia and Bavaria), Austria, Russia, and Denmark, and made a comprehensive report to the legislature, which was published by the State of Ohio in 1837. In reference to Prussia he states:

Indeed, I think the system in its great outlines as nearly complete as human ingenuity and skill can make it, though, undoubtedly, some of its arrangements and details admit of improvements, and some changes will, of course, be necessary in adapting it to the circumstances of different countries.

Professor Stowe refers to the fact that the German (i. e., Prussian) system had already been introduced into this country by private enterprise in the German-English elementary schools with two languages. As this expression of a prominent American is of special interest, I may be permitted to give the following quotation:

There is one class of our population for whom some special provision seems necessary. The children of foreign immigrants are now very numerous among us, and it is essential that they receive a good English education. But they are not prepared to avail themselves of the advantages of our common English schools, their imperfect acquaintance with the language being an insuperable bar to their entering on the course of study. It is necessary, therefore, that there be some preparatory schools, in which instruction shall be communicated both in English and their native tongue. The English is and must be the language of this country, and the highest interests of our State demand it of the legislature to require that the English language be thoroughly taught in every school which they patronize. Still, the exigencies of the case make it necessary that there should be some schools expressly fitted to the conditions of our foreign immigrants, to introduce them to a knowledge of our language and institutions. A school of this kind has been established in Cincinnati by benevolent individuals. It has been in operation about a year, and already nearly 300 children have received its advantages. Mr. Solomon, the head teacher, was educated for his profession in one of the best institutions of Prussia, and in this school he has demonstrated the excellencies of the system. The instructions are all given both in German and in English, and the use of the two languages does not interrupt the progress of the children in their respective studies. I can not but recommend the philanthropic institution to the notice and patronage of the legislature.

In neighborhoods where there is a mixed population it is desirable, if possible, to employ teachers who understand both languages, and that the exercises of the school be conducted in both, with the rule, however, that all the reviews and examinations be in English only.

As a supplement to his comprehensive report, Professor Stowe added a translation of the Prussian school laws, which were taken into consideration in framing the school law of Ohio in 1839. Thus Ohio, like Michigan, attained in a different way a State school system based upon German ideas, that has surely done much toward helping these progressive States to their present flourishing condition.

In New England at this time a lively movement was begun toward educational reform. The events at Harvard, the founding of the schools in Northampton and New Haven, the ever-increasing number of publications, and the lively personal agitation of many prominent men, necessarily weakened gradually old traditions. The legislature of Massachusetts sent for the report of Professor Stowe and made it generally known. Two men in particular—Horace Mann and Henry Barnard—fought with as much success as energy against the old system of district schools with their mechanical methods.

As early as 1837 Horace Mann brought about the appointment of a "State board of education" in Massachusetts, of which he was made secretary. In his annual reports he advocated educational reform with ardent zeal, but lived to experience the positive opposition of teachers themselves. In the year 1830 the teachers of New England, with whom educators from other parts of the country subsequently associated themselves, had formed the "American Institute of Instruction," in

which pedagogical questions were discussed at the annual meetings held in different places. This association had listened to lectures by several Germans (Follen in 1834 and Hermann Bockum in 1835), had been instructed as to the advantages of the people's schools of Germany, and had even conducted a correspondence with Victor Cousin, in which expressions of esteem are not wanting. But when in the year 1839 Mann demanded the introduction of the study of modern languages, he met with violent opposition, which was strengthened when, in 1843, he published his seventh annual report, since so renowned, in which he gives a detailed statement of the events of his travels, undertaken at private expense, to Scotland, Saxony, and Prussia. In this report he severely censures the faults of every system applied in American instruction, and places that of Prussia foremost as a model of a thoroughly and consistently executed system, without referring to its deficiencies. Proceeding on the principle that "in a republic ignorance is a crime," he demanded radical reforms according to the proposed model.

The reply, entitled "Remarks on the Seventh Annual Report," addressed to Mann by 31 Boston teachers, is not without interest. They protested against Mann's "Utopian" and "revolutionary" ideas, which did not even allow corporal punishment, sanctified by age; and complained in bitter terms that Mann should have spoken of American schools as "dormitories" in comparison with those of Prussia; they even reproached him with partial ignorance of American conditions.

Fortunately, however, the 31 protesters could not stop the march of events. Mann succeeded at least in paving the way for his reforms. In 1839 he established the first American normal school in Massachusetts, which was thus founded one year after the German institution in Philippsburg that proved a failure. What Mann's "normal school" signified, which was followed in the same year by a "teachers' institute" in Connecticut, established by Henry Barnard, we learn from the following statement of a specially gifted educator:¹

Normal school.

When the agitation for better education had fairly set in (in the decade 1835-45), it was clearly seen that the provision of better teachers was necessary to the accomplishment of the end. About the same time the attention of American educators was first drawn to the school systems of the German states, in which the teacher's seminary, or the normal school, as we have chosen to call it, borrowing the name from the French, is such an important feature. In these facts originated the movement to give elementary teachers professional training as well as academical training. The first American normal school was founded in 1839, and the number of such schools has continued to increase until the present day. But the effort to provide professional training for teachers has not been confined to normal schools. Training classes are found in high schools, while pedagogical departments and chairs, which look rather to the preparation of teachers for the secondary schools, have been established in many colleges and universities. A small number of teachers' colleges have also been established. Public normal schools are divisible into two classes—schools supported by the States and schools supported by the localities or cities. Many cities have adopted the policy of providing, in whole or part, teachers for their own schools.

A teachers' institute may be defined as a normal school that is held for a short term with a short course of study, and conducted according to methods peculiar to itself. It is known only in the United States, save as it may have been introduced in Canada. In 1839 Dr. Henry Barnard, then secretary of the Connecticut board of education, "in order to show the practicability of making some provision for the better qualification of common school teachers, by giving them an opportunity to review and extend their knowledge of the studies usually pursued in district schools, and of the best methods of school arrangements, instruction, and government under the recitations and lectures of experienced and well-known teachers and educators," called together at Hartford for a month's session, such teachers of Hartford County as were disposed to attend, organized them into a school, and, with several instructors whom he had called to his assistance, pro-

¹ Compare the article of Hinsdale in the *Encyclopædia Britannica*, American Supplement, XXIX, page 2657.

ceeded to instruct them along the lines proposed. This was the first institute of which we have any knowledge; the name, however, was given at a later day. The next year Dr. Barnard held a second one for ladies. Other educators were quick to imitate his example, and soon the institute spread over the States that were participating in the forward educational movement then in progress.

Besides Mann and Barnard, Francis Wayland, of New York, deserves mention as being a prominent pedagogical reformer of these times. From 1826 to 1855 he was president of Brown University in Rhode Island, where he instituted, even if, unfortunately, only for a time, liberty of instruction and study. He also introduced instruction in modern languages, and provided a great number of German books for the university library. It was specially through his works, however, that he gained a widespread reputation. Among these his *Thoughts on the Present Collegiate System in the United States* (1842), and his *Report to the Corporation of Brown University on Changes in the System of College Education* (1850) deserve special mention.

The second third of the nineteenth century is strikingly characterized by the efforts of distinguished men, who, following Victor Cousin's advice, recommended their compatriots to make use of the accomplishments of Germany in culture generally, and for the organization of the system of education in particular. From the long list of names we add to those already mentioned the following, to whom frequent allusion is made:

Alexander Dallas Bache, president of the celebrated orphan asylum founded by Stephen Girard in Philadelphia, was sent to Europe in 1837 and 1838 for the purpose of studying educational systems, in order to draw up appropriate regulations for the institution. On his return he composed his celebrated *Report to the Trustees of Girard College on Education in Europe*, which was published in Philadelphia in 1839. Six of the sixteen chapters of the report are devoted exclusively to German relations, and they are frequently referred to in other places. He maintains the fundamental idea that the general principles of education must be based upon human nature, but that they must be modified according to national differences. In this sense he recommends the Prussian model for the purposes of the institution.

Frederick Henry Hedge was one of the first, if not the first, American to complete his education at a German gymnasium, where he acquired a thorough knowledge of the German language. He was therefore able to make a life work of spreading the knowledge of German poetry and philosophy in America.

Theodore Parker was a minister thoroughly acquainted with German literature, even that of no theological tendency. Knortz comments on his other work:¹

His article on German literature, appended to C. C. Felton's English translation of Menzel's history of literature, is very interesting; in this, he makes a vigorous attack on the nativism of his compatriots. At that time American women in New England were accused of so far forgetting themselves as to admire nothing but German classics. A German epidemic was said to have broken out, to which professors and theologians had fallen victims. Parker, who upon occasion could be sarcastic, expresses his astonishment that German literature was not thrown back into the salt ocean when it landed on American soil; but, whilst the guardians of morality had fallen asleep, the enemy came, and American youths and virgins paid homage to the German lotus. He makes a bold stroke for German literature and philosophy, which he considers as important as religion, and proves by numerous examples that Germans are not, as the Know-nothings so often sounded forth, nothing but unbelievers, tobacco smokers, visionaries, and compilers of dictionaries. He triumphantly proclaims German literature to be the richest, freshest, most beautiful, original, and religious of modern times. England [he states] boasts much of its classical learning; but the men who prepare faultless editions of Roman and Greek authors and write keen explanations for them are Germans. He thus proves the superiority of German science in all departments.

¹ Knortz, *History of North American Literature*, I, page 263.

The Emerson brothers may be numbered among the Coleridgeans to whose great influence reference has already been made. William was at first a theologian, and sought Goethe in Weimar, to lay before him his religious scruples. As Goethe's diplomatic advice gave him little comfort, he changed his profession and became a lawyer, whilst his brother, Ralph Waldo, so prominent in philosophy and polite literature, became a minister. His essays belong to the pearls of the literature of the world. He says of Goethe that, since Shakespeare, the world has produced no mind equal to his.

Goethe exerted the very strongest influence over the group of American authors in question. Longfellow has already been mentioned in this regard. George Henry Calvert, the author of "Goethe, His Life and Works," and Bayard Taylor should not be omitted. The latter paid his first visit to Germany in 1844 to take his tramp through that country, which he has so charmingly described in his *Views Afoot, or Europe with Knapsack and Staff*. He was attracted back to Germany again and again, where he met his companion in life, and acquired so thorough a knowledge of the language that he was able to produce his celebrated translation of *Faust*.

At the memorable banquet of former students of Göttingen, held at the Metropolitan Club in New York, November 12, 1898, an object lesson was, in a manner, given on the importance to America of the element of culture that is gained by the development of American intelligence at German high schools. Among those who pursued their studies at the Georgia Augusta before 1850, or soon afterwards, were Edward Everett, George Ticknor, George Bancroft, G. H. Calvert, Emerson, Longfellow, John Lothrop Motley, Basil L. Gildersleeve, Francis T. Child, and George Martin Lane. At that time this category numbered 225 students, of whom not fewer than 137 became professors at American universities and colleges.

One of these, Prof. E. T. Harris, of Amherst College, thus expresses himself on the advantages which the students enjoy there:

Has the American student anything especially to gain in seeking a German university? My observation and experience answer in the affirmative. The important sentiment first referred to can only ripen into profit and pleasure by viewing the scenes I have recounted. We must compare the foreign with the home scenes, that we may appreciate our own. And in the purpose of a scholar it is of the first importance that the opening and developing mind should take in the different methods and points of view we meet with in foreign institutions, where we can come in contact with the very sources of science and all modern thought. It acts as a quickening impulse, and not a few have, for the first time, felt that glow of a burning enthusiasm as they contrasted the German thought and method with those of their native realm. It is like feeding flocks in new fields. There is an added sentiment which has so often been the keynote to so many Americans that have there had a new birth, and afterwards developed oftentimes to honorable standard, frequently to distinction, and sometimes to fame.

Harris, it is true, belongs to a former generation, but the fact that, at present, the American colony in Göttingen averages 30 to 50 students each session proves that the same force acts now as before, despite the great reforms carried out in the system of higher education in this country. The only novelty consisted in the women students, of whom Miss Margaret E. Maltby, the second American woman who ever received an academic degree in Germany, was graduated, a few years since, as doctor of philosophy.¹

It were not easy to exhaust the plenitude of intellectual relations between Germany and America represented by the students of Göttingen alone. But Göttingen is only one among several dozen of German universities.

¹It is probably deserving of mention that the hall was ornamented with the busts of the following six men: Edward Everett, George Bancroft, Motley, Longfellow, Benjamin Franklin, and Prince Bismarck. The latter was so intimate a friend of Motley from their school days that the relation continued till the latter's death.

Before 1850 Berlin and Halle were regarded with special favor, and, subsequently, Leipzig, Munich, Heidelberg, Freiburg, Würzburg, and many others came into notice. President Thwing estimates the number of students abroad at 700 a session. How great, then, must be the number of Americans who have studied in Germany or the neighboring German-speaking countries! There must be thousands, if not tens of thousands, among the living, and the influence of this élite element must, as a matter of course, promote the relations of civilization between the two countries.

In contrast to this American exodus to the East, the constant movement westward annually brought fresh streams of German immigrants into this country. After the movement of 1848 and 1849, that notable class of German-Americans came over that are distinguished from other European malcontents as "the emigrants of 1848" (*Achtundvierziger*). The greater number of these were physicians, lawyers, ministers, authors, and professors of all kinds, who had adopted the cause of the rights and liberties of the people at the sacrifice of position and honors, as well as fortune. They were forced to emigrate in order to escape the persecutions which they would be called upon to suffer on account of their participation in the revolution. In this country they were taunted by the name of world reformers, because they criticised existing conditions here just as much as those that they had left behind.¹ They discovered, at the same time, however, that as much as reform might be needed, there was possibility of improvement, as American intelligence was positively resolved to smooth the way for all rational progress.

The burning questions of the times were abolition and educational reform, both of which presented to the educated representatives of German idealism a specially suitable field of action, in which they could cooperate, body and soul, with the best native citizens. The cause of German instruction in public schools, particularly, received a decided impulse because of the circumstance that so many educated teachers were at one time at command. We have already mentioned some Germans, as Charles Follen, Francis Lieber, Dr. Beck, Dr. Blättermann, and Oscar Seidensticker, who occupied chairs at universities. There was now no longer a lack of teachers to prevent the introduction of optional German instruction in the public schools of cities with a large German population. In the beginning of the fifties its introduction was effected, as in New York, where, besides French, it became an optional study in the highest class (1854). In the middle of the century the flourishing period of German private and association schools first began, and only upon their decadence could the introduction of this study into public schools meet with success. It was in the natural order of events, therefore, that fresh efforts were made to found a German normal school. Dr. Ad. Douai gave his whole energy to the work in New York, and at the same time was one of the strongest advocates of Fröbel kindergartens, the first of which was opened in 1855 by the wife of Karl Schurz at her residence in Watertown, Wis.

The following words of a competent Anglo-American judge in recognition of the work of the emigrants of 1848 may be appropriately quoted:

These Germans founded a vigorous German-American press for both defensive and offensive warfare. Some of them even dreamed of a great German Freistaat in America. But the most of them were men of cool heads, and looked with a steady gaze to the future of the great Republic. They took up the antislavery cause and made noble sacrifice for the American Union. They transplanted the new turner organizations and revived the gymnastic spirit of Beck, Follen, and Lieber, advocating the doctrine that has become one of the cardinal principles of American education to-day: that manhood is the backbone of the nation's strength. They introduced the scientific method and spirit of the Fatherland, many of them becoming strong factors in American education. They introduced German art, especially the art of music, winning American admiration for the

¹ Compare Mueller's *Reminiscences of an Emigrant of '48*, page 7.

rich melodies of German song, and eclipsing the masters of Italian opera. They have been, in a word, the inaugurators of a new era of German influence in American life, and we, as a nation, are now at the zenith of this great German revival.¹

The agitation of mind that preceded the civil war was by no means favorable to the positive work of educational reform, which came in a degree to a standstill during the war. The new citizens of the Republic, on that very account, had a better opportunity to prove their patriotism and show their gratitude for the hospitable reception which they had received in the New World. As a matter of fact, they were a valuable aid to the North in its struggle. The following quotation is taken from Vocke's *The German Soldier in the American Civil War*:

We have no complete statistics to inform us with any exactness how great the participation of the different nations represented in our country was in the civil war. According to the statements of Dr. A. B. Gould, who was commissioned by the United States Sanitary Commission to make out his report, "*Investigations in the Statistics of American Soldiers*," an American work which, as far as I know, is considered the most reliable by the bureaus in Washington, the Germans gave 187,858 men to the Union army, while, in proportion to the German population, as given by the census of 1860, they need only have sent 128,102. According to these figures, therefore, we may assert that the proportion of German troops, in relation to the population, was greater than that of the troops of other nationalities. The Germans likewise gave a number of brilliant leaders and many officers of higher and lower rank whose names are imperishable in the history of the war.

It would lead us too far from our subject to go beyond this short allusion to the circumstances of the case. We understand from it why American patriots never seriously doubted on which side the body of German-Americans would be found if vital interests of the nation were ever at stake. That is true of the whole history of the nation from the beginning to the present day.²

The great events of 1866 and 1870-71 were needed, it is true, to open the eyes of the public at large to the nucleus of substantial and respectable citizens contained within the German communities and particular States. This insight reacted encouragingly on the promotion of German instruction, as the increased attendance on German courses in different places proves.

No event from the end of the civil war till the close of this epoch furnishes a better indication of general progress than the founding of Cornell University, opened October 7, 1868, at Ithaca, N. Y. This institution is named after a prominent resident of that city, Hon. Ezra Cornell, who contributed a half million dollars toward its foundation, upon the advice of Andrew D. White as to how that sum of money could best be devoted to the common good. The programme of Cornell is as short as it is pertinent: "I would found an institution in which anyone may study anything." Could a better man have been found for the execution of this design than the present member of the Berlin Academy of Sciences? He has kindly given to the writer the following information concerning the plans which he cherished when he accepted the presidency:

I may observe that instruction in German has been begun and taken large proportions since I was a student at high school, college, and university. In my young manhood very little instruction, if any, was given in the German language and literature at the leading universities of the United States. What was given was entirely outside any regular course of study and was very little thought of. At Yale University, at the time of my graduation, 1853, no instruction whatever in German was offered to students, though that institution was the second in importance in the United States.

Since that time a very striking development has taken place. In presenting a plan of organization for Cornell University, which was established in 1865, I, as its first president, laid especial stress on the importance of instruction in the German language and literature, and from the opening of that university to instruc-

¹ Thos. J. Learned, "German as a culture element in American Education," p. 19.

² Compare *The German-American during the War between the United States and Spain, 1898*. An address delivered July 4, 1899, by Charles G. F. Wähle.

tion in 1833 the German literature has held quite a large part. In order to create an interest in the literature I called the late Bayard Taylor, who was a devoted lover of German literature, to give lectures on the subject, and also called some resident professors and instructors to take charge of the regular instruction in German. Other large institutions have done the same thing, until now such instruction forms a very important part in the curricula of almost all the leading institutions of learning.

The direction of Cornell University in this way contributed much to inaugurate the most recent epoch in the development of the entire educational system. The author of the classic study on the New Germany deserves the praise of having encouraged, by his action, the advocates of reform to further progress, which has since been happily realized and found tangible expression in the organization of the Johns Hopkins University, the University of Chicago, and the Leland Stanford Junior University.

It would be unjust to pass over in silence the fact that many leading educators in the country had the same end in view as White. Several of these will be mentioned later. We shall now refer to but one, Dr. W. T. Harris.

* * * * *

III. FROM 1876 TILL THE CLOSE OF THE CENTURY.

In 1876 the Johns Hopkins University was founded and the scientific study of the modern languages first introduced. It would be hard to overestimate the influence of this university in giving full academic recognition to the modern languages, in stimulating original research by basing it on purely scientific methods, and in bringing about a more enlightened attitude toward these languages in other centers of learning.

With these words, allusion was made to the founding of the Johns Hopkins University at a large convention of prominent educators.¹ As the new university at first established only one faculty the work could be the more thoroughly carried out, and German derived the greatest advantage. From the very beginning, therefore, German-Americans manifested the greatest interest in this institution. This is proved by the memorial published in 1837 by the former German Literary Bureau, of Baltimore, which took an active interest in the university.

The following instructive extract is taken from the long article of Prof. E. D. Schönrich:

The Johns Hopkins University, founded by a legacy of \$3,500,000 left by the generous Baltimore merchant whose name it bears, was opened October 3, 1876. The administration of the new university was confided to a board of trustees composed of 12 prominent citizens selected by the founder during his lifetime, and this board invited Dr. Daniel C. Gilman, then president of the University of California, to accept the presidency. In May, 1875, he entered upon his duties, and at the opening of the university he had already given convincing evidence of his exceptional ability as an organizer and administrator. In the organization the German university, besides the French and the English, was kept in view as a model, with such changes and additions as were deemed wise for American conditions. Thus, within the university a preparatory school "college" was established. This college corresponds, in the main, to the three highest classes of a German gymnasium; only the students are allowed a conditional selection of studies (elective system), and certain principles of the German high school (*Realschule*) have been introduced. The course of studies in the college is arranged for three years. The studies themselves are divided into seven groups, namely:

- I. Classical group.
- II. Mathematical-physical group.
- III. Chemical-biological group.
- IV. Physical-chemical group.
- V. Latin-mathematical group.
- VI. Historical-political group.
- VII. Group for foreign languages.

The whole system aims to adhere to the spirit and organization of the German gymnasium training, with wise consideration of the demands of modern times.

¹ Convention for the founding of the Modern Language Association in Columbia College, 1883.

A diploma of this "college" admits to the university proper. A noteworthy arrangement in the "college" is "the board of collegiate advisers," composed of representative lecturers in the different departments. Upon entering, every college student is referred to one of the members of this board as adviser, who assists him in the selection and pursuit of his studies, to whom the young student may confidentially apply in private affairs, and who, in a certain way, is sponsor to him until his admission into the university. In the university, from the very beginning the most conscientious effort is made to direct students to independent action. All tends to this end. In this respect students are not left to themselves, as in Germany.

Instruction is given according to the German principle of the seminary. All lectures are interpreted in the work of the seminary. The professor proposes themes, which are developed by the students and must be submitted for discussion. What is known in German universities as "*privatissima*"—regular meetings in the home of the lecturer—is now and then zealously put into practice. Instruction is thus more and more individualized, every individual is stimulated to independent action, and, by intimate intercourse between teachers and pupils, exchange of thought and knowledge is assumed in its highest potentiality.

The university has but one complete faculty—that of philosophy. The medical faculty is about to be established.¹

The university faculty numbers 53 professors and lecturers. With but few exceptions, all have spent more or less time at German universities, 12 of them having received abroad the degree of doctor. These are B. L. Gildersleeve, Ph. D., Göttingen, 1853; Ira Remsen, Ph. D., Göttingen, 1870; H. N. Morse, Ph. D., Göttingen, 1875; W. E. Story, Ph. D., Leipzig, 1875; H. B. Adams, Ph. D., Heidelberg, 1876; Paul Haupt, Ph. D., Leipzig, 1878; Henry Wood, Ph. D., Leipzig, 1879; M. Warren, Ph. D., Strassburg, 1879; R. T. Ely, Heidelberg, 1879; E. Renouf, Ph. D., Freiburg, 1880; Julius Göbel, Ph. D., Tübingen, 1881; G. H. Williams, Ph. D., Heidelberg, 1882; Herbert W. Smyth, Ph. D., Göttingen, 1884.

Two of the above, Professor Haupt and Dr. Göbel, are native Germans. The former was for three years professor of Assyriology at the University of Göttingen. One of the lecturers, Dr. Edward H. Spieker, is a German-American.

No wonder that German is called the "court language of the university." That the German department under such circumstances is most flourishing is evident. Those in charge are Prof. Dr. Henry Wood, Dr. Marion D. Learned, and Dr. Julius Göbel.

Johns Hopkins has been recognized in German university circles as an important scientific center. The rector of Heidelberg University, Professor Kühne, wrote a letter to President Gilman January 2, 1887, in which he says:

On its foundation, and when we became acquainted with its excellent organization, we greeted the Johns Hopkins University with special pleasure as a scientific sister of the New World, and again after the new institution gained the highest recognition everywhere by its magnificent work. In the beginning of its sixth century, old Heidelberg has won a new and young friend, and who knows but that in the future it will not be outstripped by its young, vigorous companion? However the case may be, we can always learn from each other, and I can not suppress the desire that the students of our universities may frequently have the opportunity of studying with you as your compatriots with us.

This letter is a fine testimony that German academicians acknowledge their American colleagues to be equal factors in the great international republic of letters, although the latter have begun to win their laurels in a relatively short time. The Americans, however, have had the advantage of being able to make use of the accomplishments of all older civilized nations for their own advancement, and they have profited well by their opportunity. The possibility that American universities may, in the course of time, outstrip the German, as Professor Kühne says, is therefore not inconceivably far off.

In the meantime, the best teachers and directors of American universities fully agree that they can still learn a great deal from Germany, while the German language is one of the most important mediums to transmit the German

¹It was opened in 1893. In 1860 Professor Gildersleeve founded the American Journal of Philology, which proclaims the progress of that science in America throughout the world.

intellectual treasures which are to be again turned to account. This is verified in a most notable passage of an address of President Gilman to his students.¹ "As Latin was the language of the scholars during the Middle Ages, so the knowledge of German is now indispensable for anyone who claims the name of a student and scholar." The opinion that President Gilman alone holds this view is best disproved by the definition which Charles W. Eliot, president of Harvard, has given of a "liberal education." In a speech delivered at Johns Hopkins, he says:²

The next subjects for which I claim a position of academic equality with Greek, Latin, and mathematics are French and German. This claim rests not on the usefulness of these languages to couriers, tourists, or commercial travelers, and not on their merit as languages, but on the magnitude and worth of the literatures, and on the unquestionable fact that facility in reading these languages is absolutely indispensable to a scholar, whatever may be his department of study. Until within one hundred or one hundred and fifty years scholarship had a common language, the Latin; so that scholars of all the European nationalities had a perfect means of communication, whether in speaking, writing, or printing. But the cultivation of the spirit of nationality and the development of national literatures have brought about the abandonment of Latin as the common language of learning, and imposed on every student who would go beyond the elements of his subject the necessity of acquiring at least a reading knowledge of French and German, besides Latin. Indeed, the advanced student of our day can dispense with Latin better than with French, German, or English; for, although the antiquated publications in any science may be printed in Latin, the recent (which will probably contain all that is best in the old) will be found printed in one of these modern languages. I can not state too strongly the indispensableness of both French and German to the American or English student. Without these languages he will be much worse off in respect to communication with his contemporaries than was the student of the seventeenth century who could read and speak Latin; for through Latin the student of the year 1684 could put himself into direct communication with all contemporary learning. So far as I know, there is no difference of opinion among American scholars as to the need of mastering these two languages in youth. The philologists, archaeologists, metaphysicians, physicians, physicists, naturalists, chemists, economists, engineers, architects, artists, and musicians all agree that a knowledge of these languages is indispensable to the intelligent pursuit of any one of their respective subjects beyond its elements. Every college professor who gives a thorough course of instruction—no matter in what department—finds himself obliged to refer his pupils to French and German authorities. In the reference library of any modern laboratory, whether of chemistry, physics, physiology, pathology, botany, or zoology, a large proportion of the books will be found to be in French or German. The working library of the philologist, archaeologist, or historian teaches the same lesson. Without a knowledge of these two languages it is impossible to get at the experience of the world upon any modern, industrial, social, or financial question, or to master any profession which depends upon applications of modern science. I urge no utilitarian argument, but rest the claims of French and German for admission to complete academic equality on the copiousness and merit of the literatures and the indispensableness of the languages to all scholars.

And at another place in his paper he remarked:

The opportunities and facilities for studying Greek and Latin in our schools are none too great, but surely the opportunities and facilities for studying French and German are far too small. The modern languages should be put on an equality with the ancient.

The effort to place modern languages on a par with the classical in the curriculum of higher institutions is the mark of the last epoch in the history of American education, and this aim naturally contributed to an extraordinary degree to the promotion of German in various directions. Ample proofs of this exist.

At the annual meeting of the National Educational Association held in Baltimore in the year 1876, Prof. Edw. S. Joynes, of South Carolina College, read a paper on the subject, "Position of the modern languages in the higher education," in which he advocates "that the modern languages be elevated from the merely tuto-

¹ Baltimore, Its Past and Present, p. 206.

² What is a Liberal Education? A paper read on the 23d of February, 1884.

rial position which they have so often occupied to a rank and dignity in our higher institutions of learning commensurate with their disciplinary value, with their literary importance, and with their intimate relations to our own language, history, and nation." The convention agreed upon this, as their resolutions proved. This purely academic recognition of the justice of their efforts was naturally not enough for the reformers. Six months after Prof. Charles Francis Adams's sensational speech at Harvard against the "fetich" of Greek, to which modern languages were to be sacrificed, a number of interested men, at the instigation of the teachers of Johns Hopkins, met in New York to form a league for the promotion of modern languages.

At the convention held in the Columbia College halls, December 27 and 28, 1883, for the purpose of founding the Modern Language Association of America, the large colleges and universities of the East, the State University of Michigan, and 12 other colleges were represented by 32 gentlemen, who discussed the following subjects:

- I. The present condition of English, German, and French in our colleges.
- II. The methods of teaching the modern languages.
- III. The best expedients.

Respecting the transactions of the first annual meeting, likewise held at Columbia, December 29 and 30, we need only mention that the following question was discussed:

"Would it be desirable to allow the substitution of one modern in place of one ancient language for admission to college?"

The result of this debate was the appointment of a committee composed of Professors W. T. Hewett, chairman; Dr. H. C. G. Brandt, J. H. Worman, W. L. Montague, and H. A. Todd, who were commissioned to make exact inquiries and submit the results, together with their own opinion, at the next annual meeting. The committee fulfilled their duty in the best possible manner.

The exceptionally thorough and instructive report drawn up by Professor Hewett reads as follows:

THE PRESENT CONDITION OF INSTRUCTION IN THE MODERN LANGUAGES IN AMERICAN COLLEGES.

At the last meeting of the Modern Language Association of America a committee was appointed to examine and report upon the present state of instruction in the modern languages in our American colleges.

The first duty of the committee was to examine the courses of study in French and German offered in the different colleges, to determine, as far as was possible, the time devoted to these studies, both required and elective, the order in which they were pursued, whether they were required for admission, and their relative place in a college curriculum. In pursuance of this duty the committee sent out blanks to nearly a hundred colleges, and received in reply statements of the courses of study and the amount of time devoted to each language.

From catalogues and written reports of instructors the committee has prepared a tabular view of the instruction given in these colleges. The inquiry for information was sent to leading colleges in the East, South, and West, and the returns represent with approximate accuracy the usage of different sections.

We purpose to present briefly the results obtained by this investigation:

First. What is shown to be the prevailing usage in requiring one or more of the modern languages for admission?

Until within a few years the classics and mathematics, with a brief English examination, have been the main requirements for admission to college. The introduction of French or German is comparatively of recent date. Harvard imposed a slight prerequisite for admission in 1874; Cornell University added one year of French, German, or advanced mathematics to the courses in science, literature, and philosophy in 1877; but the traditional requirements in most colleges remained unchanged. A doubt existed of the capacity of training schools to meet this new requirement.

If we examine the table to determine how general the requisition of French or German for admission to the course in arts is, we find that half a dozen colleges

require only one of these languages, and the requisition is extremely meager, not embracing scientific grammar or any definite knowledge of the literature, but an elementary knowledge of forms and the translation of easy phrases. Harvard, Yale, and the University of Pennsylvania require about a half year of one of these languages. Brown University requires one year of French. Boston University and Amherst College one term of French. Swarthmore College requires one year or more of French and German. We thus see how limited even yet is this requirement for admission. A significant event in the past year has been the revision of the courses of study at Yale, with a view of giving a larger place to the modern languages, and the harmonization of other prescribed studies. Through this action at least one-half year of French and German is required for admission, and the study of one or both languages is required during the first two years. A certain liberty of election is permitted during the junior and senior years.

The considerations which in our judgment demand that the elements of French and German shall be required of all students before entering college are: That language is acquired with greatest facility when the student is young, and modern languages have a special claim, since their practical use is essential to so many students. If instruction in French and German is postponed until late in the course, a mastery of the language as well as a comprehensive study of the literature is impossible.

The objection to the study of French and German in our secondary schools has been due to the fear that satisfactory instruction in these languages could not be obtained. In a paper read before the association at its last session I attempted to show that if elementary instruction in Latin and Greek could be successfully given in the preparatory schools by our college graduates there is no reason why the same graduates, if skillful instruction is imparted in college, should not be equally competent to teach French, German, and historical English. I showed, further, from the statistics of the examinations at Harvard for ten years, that while the percentage of students conditioned in these languages upon entrance was at first high it has gradually fallen until in recent years as many have been conditioned in algebra and geometry as in French or German. The number conditioned in English is nearly as great as that conditioned in German. The test of experience has shown that the colleges give direction to all elementary instruction, define its nature, and prescribe its amounts. The standard of instruction in our colleges should not be dependent upon the low average of the majority of our high schools and academies, but should be determined solely by the requirements of higher culture. The law of educational history is that the higher institutions and the higher demands everywhere condition and prescribe the character of the lower.

The objections that may be urged to requiring French or German as requisite for admission to college may be either that the preliminary course of study is already crowded and that no time remains to be devoted to the modern languages, or that in natural order they should be studied later, or that the schools can not give the requisite training. The direct requirements in the classics and mathematics for admission to college may be met in a course of study of three years. The average age of students entering upon the classical course in our colleges is about 18½. If we omit a mass of subjects which are irrelevant or superficially pursued, or which can better be studied later, there is ample time for a thorough elementary training in the modern languages, and there is no reason why the classics should monopolize the earliest and most useful years of the student. There is no purpose in this view of the case to displace the classics, but only to claim an equal right beside them for the modern languages and to insist that language is acquired with greater ease, as regards idioms and pronunciation, early in life than later, and that only when thus studied does it become a permanent possession.

The second question presented by an examination of this table of courses and studies is, What place is assigned to the modern languages?

Out of 50 conferring the degree of bachelor of arts, 18 or 36 per cent could offer instruction in French or German in the freshman year, while 22 or 44 per cent begin the study in the sophomore year; 8 or 16 per cent in the junior year, and 2 or 4 per cent in the senior year. In 23 colleges, or nearly one-half of the whole number, the study of one language is not begun until the junior year. The Canadian colleges which are included in this table, University College of Toronto University, McGill College of McGill University, and Dalhousie College of Dalhousie University, exhibit a progressiveness of spirit and a thoroughness of instruction in the modern languages which may well be imitated by many of our American institutions. In all these instruction in French and German is begun in the freshman year.

An interesting fact, revealed incidentally in the study of this table, bears upon a mooted point at the present time in considering the meaning which attaches to cer-

tain degrees—What value shall the degree of Bachelor of Arts represent? The discussion of this point is foreign to this report, but the following colleges confer the degree of Bachelor of Arts without a knowledge of Greek: Dalhousie College, the Johns Hopkins University, the University of Oregon, Randolph-Macon College, South Carolina College, and Swarthmore College; Harvard and the University of Toronto require an entrance examination in Greek. As a substitute for the entrance examination in Greek, the Johns Hopkins University requires an examination in both French and German; Dalhousie College, in French or German; South Carolina College gives the degree of B. A. for all courses of study. Tulane University confers the degree of B. A. for courses in classics, modern languages, mathematics, natural science, commerce, and mechanics.

The third question to which an answer is given in this table is, What position do French and German occupy in modern college education?

Out of 50 colleges 29, or 58 per cent, require one foreign language; 18 or 36 per cent require no foreign language for graduation in arts; 18 or 36 per cent require both French and German.

There is a marked difference in the different colleges in the amount of instruction afforded in the modern languages. Assuming 15 hours per term as a normal average of the studies of each student and 190 hours as the aggregate of the four years' course, the smallest number of hours of instruction offered in French and German in any college conferring the degree of B. A. is 15 hours, or 8 per cent of all the studies of the curriculum, or, in other words, only one-twelfth of all the time of the student is devoted to the study of the literature of France and Germany. This minimum is counterbalanced by the extended courses in French and German offered in Harvard, Cornell, Michigan, and Toronto universities and Columbia College, where the percentage of elective hours possible in modern languages reaches 53 per cent of the entire curriculum for the degree of B. A.

Of 50 colleges conferring the degree of B. A. from which full reports have been received, Harvard, Michigan, and Cornell universities offer more than 100 hours in French and German out of a possible 190; Toronto, California, and Columbia offer between 75 and 100 hours; the Johns Hopkins University in its collegiate course, Yale, Indiana, Iowa, and McGill universities and Swarthmore and Amherst colleges offer between 50 and 75 hours.

Another question which is answered by the table is, What is the order of precedence of these two languages in the judgment of the majority of educators? The former prominence given to French and the comparatively late introduction of German as an essential part of a college course give French still the precedence in the arrangement of studies. French is studied in three-fourths of our colleges in the first two years. German is begun in a little more than half the colleges during the same period, while in the remainder it belongs to the last half of the course. French is begun in the freshman year in 16, German in 13 colleges; French is begun in the sophomore year in 20, German in 15 colleges; French is begun in the junior year in 11, German in 20 colleges; French is begun in the senior year in 2, German in 2 colleges. One college does not report French in its curriculum, and no mention of it appears in its catalogue. The College of the Holy Cross, in Worcester, Mass., reports little demand for German and a larger demand for French, owing, possibly, to the large number of French-Canadians in the manufacturing cities of New England. Conversely, the College of St. Louis reports almost no demand for French on the part of its pupils, but a large and uniform demand for German.

Few colleges have a modern-language requirement for admission to the course in arts. Of the 50 reported, 3 require French, 2 offer an election between French and German, and 2 require both French and German.

The position assumed at the opening of this paper, that the modern languages should be studied before entering college, receives support from the position of these studies in the German gymnasia. The practical use of at least two foreign languages, French and English, is attained before entering the university. German students possess not only a knowledge of the grammar of these languages, but familiarity with much that is best in the literatures. The admirable results attained in Germany in the *bürgerschulen* and gymnasia in the same periods in which pupils are attending our grammar and high schools show the waste of time, the dissipation of interest, the defective methods of our schools. The limitation of preliminary studies to language, viz. the classics, French and German, historical English, the essentials of arithmetic, which do not involve advanced processes, algebra and geometry, would afford the basis for an admirable collegiate training. The multiplicity of subjects, the loss of time by devoting attention to minor branches, naturally and better acquired later, are among the evils of our present school system. The pupil's powers are exhausted and no true mastery of the essentials of a single branch of knowledge attained.

The attention of school boards should be directed to correcting these abuses,

which are due to a false conception of what is required in elementary education as well as to defective methods.

We find established in the numerous colleges a course sometimes called the Latin-scientific course, but which in a majority of cases is designated as the course in philosophy. In one or two cases we find the term "course in letters," with the degree Bachelor of Letters applied to it, as in the University of Virginia. Sometimes it is called the modern-language course, with the degree of Bachelor of Arts, as in Adelbert College, or the modern classical course, as in the University of Wisconsin, where the degree of B. L. is given. This course does not require Greek, either for admission or after entering. The place of Greek is supplied usually by an entrance requirement in modern languages. In this course more opportunity is presented for the study of modern languages than in the course in arts which we have just considered. The requirements for admission are considerable, and large opportunity for the study of French and German is afforded. Nearly one-half of the colleges reported contain this course in philosophy, or one in letters of the same general character.

One course of our educational system is the variety of degrees conferred which have no specific or recognized meaning. An effort on the part of all our colleges to unify degrees and give them a fixed value would contribute to rescue our degree system from merited contempt. Degrees are even invented to accommodate them to some supposed fitness on the part of the recipient, whose qualifications would not justify a degree of general signification. The prevalence of the degree of Ph. B. suggests that its adoption in its present accepted meaning would be one step in the direction indicated.

A noticeable and commendable tendency in scientific and technical schools and in colleges offering scientific courses is shown by the prominence given to the study of the modern languages. The vast treasures of scientific discovery which are contained in these languages make the most advanced attainments impossible without them. The tendency of all professional and technical pursuits is to exclusive devotion to a single end. A narrow and strictly technical course limits the view of the relation of the different departments of science. Literary training makes thought and expression clear, and any course of study that ignores this element in education is in that degree defective and its results unsatisfying.

The leading scientific schools, such as the Sheffield Scientific School and the Massachusetts Institute of Technology, make ample provision for the study of French and German, both as instruments of culture as well as for their practical use in scientific pursuits.

The critical study of English has made a rapid advance since the foundation of this association. This is especially noticeable in our Southern colleges. Excellent advanced courses in Anglo-Saxon and Early English are now offered in many colleges in the South. For a decade, it is safe to say, this study in the North was confined to but a few leading institutions, among which Harvard, Lafayette, and Cornell deserve especial mention. An examination of the courses of study in the hundred colleges which have been reviewed reveals graver deficiencies in the study of historical English than in that of French or German. The instruction in our own language, with its matchless inheritance of the treasures of literature, is less adequate than that of the modern languages. Here the secondary schools are lamentably deficient. Years of time are spent in the study of grammar and in reading some elementary history of literature, and the student "graduates" at some famous high school with no knowledge of Anglo-Saxon, no linguistic training which will fit him to read Chaucer or even Shakespeare intelligently. The murder of the innocents is repeated in our public schools every year and in the training of nearly every scholar.

Two or three questions remain: Does the character of the French or German language or the relation of either to English or to the classics suggest a natural order in their study? It is undoubtedly true that our large German population, scattered throughout all our cities and larger villages, makes it possible to secure instruction in German from capable native teachers more generally than in French. The compulsory instruction in German in the public schools of many Western cities gives prominence to this language and promotes its study. If we assume that the historic study of English should become a part of all instruction in our lower schools, replacing the so-called English grammar, the transition to German is not difficult. Its kindred words and inflexions will present enough of divergence of form to stimulate comparison and attract interest without the introduction of the difficulties of an entirely dissimilar language. For students unfamiliar with the classics, the discipline of a language possessing such a regularity of forms and fullness of inflexions as the German affords a linguistic discipline akin to the classical.

Similarly, the entrance upon the study of French through the Latin is easy. A knowledge of French is, however, of high, if not indispensable, value in the study of semi-Saxon, and of later English. These considerations reenforce our position at the opening of this paper, that both in themselves and from their relation to later study, instruction in these two important languages should be begun at an early date. A knowledge of French will, conversely, throw light upon Latin forms and facilitate its acquisition.

The question what is a proper equivalent for Greek in the requirements for admission to college can not be settled by any *a priori* or doctrinaire considerations. Admitting the equal value of both languages in modern culture, and the force of the argument in favor of their early, precollegiate study, the question of their relative order or precedence will be determined by practical considerations in the schools; only the grammar will be taught on scientific and historical principles, and a substantial acquaintance with the languages themselves will be properly required.

The above report is a commendable evidence of the earnestness and conscientiousness with which the association accepted its important mission. It was supplemented by two other reports submitted to the association, one of which referred to the progress of the study of modern languages in the South, while the other gave a general statistical review of its growth throughout the country.

The text of the first is as follows:

Report by Prof. Edward S. Joynes, of South Carolina College, on the progress of modern language study in the colleges and universities of the late Confederate States since the war (1860-1884).

The study of the modern languages was so little known in the colleges of the South before the war, as the following statement will show, that it may be said with truth that the progress exhibited in this paper covers a little more than a decade—the years (since 1837-1876) of the restored autonomy of the Southern States and of the reviving work of their educational institutions under the new condition of public affairs. Indeed the results would have been only the more striking if 1870 instead of 1860 had been assumed as our starting point of comparison, but they would not have been so significant.

Early in November I issued to 45 colleges and universities of the late Confederate States, including all institutions of any prominence, a circular letter asking for information on the points hereafter noted. I regret to say that I have received only 15 replies. The institutions from which returns are presented are the following: The University of Virginia; Washington and Lee University, Virginia; Roanoke College, Virginia; Virginia Military Institute; Virginia Agricultural College; West Virginia University; Vanderbilt University, Tennessee; University of Arkansas; South Carolina College; Wofford College, South Carolina; South Carolina Military Academy; University of Louisiana; University of Texas; Southwestern University, Texas; Austin College, Texas. Many of the institutions from which the most important returns might have been expected are, I regret to say, not reported, notably the University of North Carolina, the University of Tennessee, the University of Georgia, the University of Alabama, the University of Mississippi, etc. But I have good reason to know that their returns would only have confirmed the results reported. It should be stated that some of the institutions here included have been founded since 1860. But this does not affect the value of the returns given. This fact is only a further testimony to the general awakening of education in the South since the war.

Summary of instruction in modern languages in fifteen colleges and universities in the late Confederate States.

	1860.	1884.	Gain.	Gain percent.
Number of professors of modern languages.....	3	15	12	400
Number of other teachers of modern languages.....	4	15	11	275
Number of students of modern languages.....	255	1,210	955	870
Total hours weekly in modern languages.....	30	298	268	790
Number of courses of study for degrees, including modern languages.....	5	47	42	840
Total years in any modern language required for degrees.....	6	36	30	500

* All in one institution, the University of Virginia.

These figures are remarkable. In fact they almost render comparison impossible, by showing that the study of modern languages has found a recognized place in the higher education of the South only since the war, or, as has been already explained, within the last ten or fifteen years. When we consider the poverty and depression of the people of the South during this period we must confess that the facts here exhibited are not only remarkable, but extraordinary and most encouraging.

In many if not all of these institutions the work done in modern languages would doubtless fall far below the highest standard. But this is due not so much to shortcomings in the colleges themselves as to the want of good preparatory schools in the South, and applies to modern languages only in common with all other departments in Southern colleges. The professors and teachers of modern languages in these colleges are, so far as I know them, men of high qualifications and of earnest purpose. The foundation at least is securely laid, and there is no reason to doubt that the work in this department will be advanced as rapidly as the condition of our Southern people may require or permit.

Much of the progress here exhibited is due to the general awakening of educational interest in the Southern States; much of it also to new and larger views of education in general—to enlarged and multiplied courses of study and the relaxation of the old curriculum. But not a little is due directly to new views of the educational value and importance of the modern languages themselves, as shown, first, by the faculties, and then in the progressive action of the governing boards of Southern institutions. Of course such movements in official quarters are only responsive to a progressive change in the general public demand, but this demand is also greatly stimulated and extended thereby. On this point I may add some interesting facts within the limits of a single personal experience—interesting not from their personal bearing, but because they illustrate the growth of opinion in influential quarters. The first chair of modern languages established in the South, so far as I know, after the war was (1866) in Washington and Lee University—then Washington College—Lexington, Va., under the presidency of Gen. Robert E. Lee, whose large and prophetic mind foresaw the future as it recognized the present demands of Southern education. Yet even under this great influence these languages were admitted, as it were, only by sufferance. A special fee of \$20, outside of the usual tuition, was charged for each modern language, thus, at first, practically excluding them from the course of study. In a few years the growing demand overcame this restriction and the modern languages were admitted into the regular courses on equality with other branches.

In 1875 the Vanderbilt University was organized on a scale designed to represent the foremost progress of Southern education. Yet in its first programme only an adjunct professorship, with greatly reduced salary, was assigned to modern languages. But before the organization was effected this was raised to the rank and pay of a full professorship, and from the first this department was one of the most prominent in the university, as now—still further subdivided—it is one of the most advanced in the South. From 1877 to 1880 a like advancement and extension of the course of study in modern languages was made in the University of Tennessee. In 1882, in the reorganization of South Carolina College, only a tutorship on half pay was assigned to modern languages, but when the faculty was constituted this department occupied a full chair, and the modern languages were made requisite in all the courses of study appointed for degrees. These are only records of my own experience, given here as signs of a public progress; others of equal interest could doubtless be found in the recent history of other Southern institutions, as the University of Mississippi, for example.

Thus, in the South all signs point to the gratifying progress of the study of modern languages in the higher education. Fifteen years ago these languages were hardly recognized in our colleges. Now there is not a Southern college of any prominence or pretensions that does not make provision, more or less extensive, for their study; and gradually, yet rapidly, they are taking their place alongside of the most favored requirements in our courses of study. This progress is supported by an intelligent and growing appreciation on the part of students and of the public. Wherever the elective system prevails these studies hold their own and show, indeed, one of the largest of the rates of increase. The day of prejudice and depreciation which I have witnessed is now past. The right of the modern languages to a place in every scheme of liberal education, on an equality with the most important studies, is now recognized in every Southern college which aspires to a leading rank.

The above-mentioned statistical review included the District of Columbia and 36 States, from which authentic reports or catalogues were obtained. Within these localities in the year 1884 there were 273 institutions with instruction in

modern languages that engaged 616 professors and instructors besides 92 other teachers.

From this list we make the following extract, which contains the 205 institutions that reported German as a special study. It is likewise of interest to add the names of the professors of German and the number of their assistants, as they are contained in the original report.

List of colleges and their professors of German.

State and institution.	Professor of German.	Number of assistants.
California:		
State University of California	Albin Putzker	
Santa Clara College	W. Melchers	
University of Southern California, Los Angeles	Rev. G. H. Bolinger	
St. Ignatius College, San Francisco	Rev. P. Mans	
Colorado:		
Colorado College, Colorado Springs	Mrs. Mary T. Hatch	
University of Colorado, Boulder	Miss Mary Rippon	
University of Denver, Denver	Dr. Wm. P. Headen	
Connecticut:		
Yale	Tutor, Alfred B. Nichols	2
Sheffield Scientific School	Instructor, Albert S. Wheeler	
District of Columbia:		
Columbian University	A. H. Janus	
Washington High School	Dr. W. Bernhardt	
Illinois:		
Augustana College, Rock Island	A. O. Bersell	
Blackburn University, Carlinville	Instructor, Th. Blanke	
Ewing College, Ewing	Instructor, Val. Minier	
Illinois College, Jacksonville	Henry E. Storrs	
Illinois State University, Champaign	Edward Snyder	
Illinois Wesleyan University, Bloomington	Wm. H. Waite	
Knox College, Galesburg	Thomas R. Willard	
Lake Forest University, Chicago	Miles Whittlesey	
Lincoln University, Lincoln	Teacher, Miss Clara Cook	
McKendree College, Lebanon	Rev. Wm. F. Swahlen	
Northwestern College, Naperville	Rev. Wm. Heidner	
Northwestern University, Evanston	Instructor, Rev. Geo. H. Horswell	
Shurtleff College, Upper Alton	Instructor, Rev. T. C. C. Clarke	
St. Ignatius College, Chicago	Rev. T. F. Pohls	
St. Viator's College, Bourbonnais Grove	Rev. Angels Dosling	
University of Chicago, Chicago	Oscar Howes	
Wheaton College, Wheaton	W. H. Fischer	
Indiana:		
Butler University, Irvington	Hugh C. Garvin	
Earlham College, Richmond	Dr. Hans v. Yagemann	
Indiana University, Bloomington (department of modern languages)	Dr. S. Garner	1
Moore's Hill College, Moores Hill	Monroe Vayhinger	
Iowa:		
Agricultural College, Ames	Preceptress, Martha Sinclair	
Iowa College, Grinnell	Instructor, Wm. T. Seelye	
Iowa Wesleyan University, Mount Pleasant	Instructor, Geo. Addiks	
Cornell College, Mount Vernon	Mrs. Harriette J. Cooke	
St. Joseph's College, Dubuque	P. Hoffmann	1
Kansas:		
Baker University, Baldwin	Miss Ida A. Ahlborn	
Bethany College, Topeka	Miss C. Adell Coleman	
Campbell Normal College, Holton	Carl F. Menninger	
Highland University, Highland	Dr. Daniel Kloss	
Kansas Normal College, Fort Scott	H. T. Bauer	
Ottawa University, Ottawa	Dr. Gge. Sutherland	
St. Benedict's College, Atchison	Chas. Stoeckle	
State University, Lawrence	Arthur G. Canfield	1
Washburn College, Topeka	Miss Nathalie Thomas	
Kansas Normal School, Paola	Miss Ella M. Kingsley	
State Normal School, Emporia	Miss Emilie Kuhlmann	
Kentucky:		
Bethel College, Russellville	John Phelps Fruit	
Central College, Richmond	J. T. Akers	
Center College, Danville	John W. Redd	
Georgetown College, Georgetown	R. H. Garnett	
Kentucky University, Lexington	Charles Schultze	
Kentucky Wesleyan College, Millersburg	B. T. Spencer	
South Kentucky College, Hopkinsville	Frans S. Braun	
Cecilian College, Cecilian Post-Office	Ferd. Kretz	
St. Joseph's College, Bardstown	Alb. Schädler	
Louisiana:		
Centenary College of Louisiana, Jackson	C. E. Greene	
Louisiana State University, Baton Rouge	L. W. Sewell	
Tulane University, New Orleans	J. Hanno Deiler	
Jefferson College, St. Mary's, St. James	Rev. A. Braxmeyer	

List of colleges and their professors of German—Continued.

State and institution.	Professor of German.	Number of assistants.
Maryland:		
Baltimore City College, Baltimore.....	Chas. F. Raddatz.....	
Johns Hopkins, Baltimore.....	Teachers, Geo. Hempf and Henry Wood.....	
New Windsor College, New Windsor.....	Instructor, Emil Benkert.....	
Mount St. Mary's College, Emmitsburg.....	C. A. Leloup.....	
St. John's College, Annapolis.....	Wm. H. Hopkins.....	
Western Maryland College, Westminster.....	Instructor, Rev. T. H. Lewis.....	
Massachusetts:		
Amherst College, Amherst.....	Henry B. Richardson.....	
Boston University, Boston.....	Augustus H. Buck.....	1
Harvard, Cambridge.....	G. A. Bartlett.....	3
Smith College, Northampton.....	Fran. Marie F. Rapp.....	
Tufts College, College Hill.....	C. E. Fay.....	
Wellesley College, Wellesley.....	Elizabeth H. Denio.....	3
Williams College, Williamstown.....	Rich. Austin Rice.....	1
Massachusetts Institute of Technology, Boston.	Charles P. Otis.....	
Michigan:		
Adrian College, Adrian.....	Barnard H. Rupp.....	
Hillsdale College, Hillsdale.....	Rev. John S. Copp.....	
Kalamazoo College, Kalamazoo.....	Instructor, Rev. Ign. Müller.....	
University of Michigan, Ann Arbor.....	Instructor, Alfred Henneguin; Professor of modern languages, Dr. Edw. L. Walter. August Lodemann.....	
State Normal School, Ypsilanti.....		
Minnesota:		
Hamline University, Minneapolis.....	E. F. Mearkle.....	
University of Minnesota, Minneapolis.....	John J. Moore.....	
Mississippi:		
Mississippi College, Clinton.....	John G. Denprece.....	
Toccoola College, Pontotoc.....	Wynn David Heldeston.....	
University of Mississippi, Oxford.....	Charles Woodward Hutson.....	
Whitworth Female College, Brookhaven.....	Teacher, Miss Annie Marion Brown.....	
Central Female Institution, Clinton.....	Emil Meuger.....	
Dudley Institute, Dudley.....	President, W. S. Dudley.....	
Elisha Calaway Institute, Macon.....	Teacher, Miss Caloway.....	
Grenada Institute, Grenada.....	Teacher, Miss Edwina Bramley.....	
Maury Institute, Holly Springs.....	Teacher, Miss Gray.....	
Mississippi Military Institute, Pass Christian.....	Professor Patrick.....	
Macon Public School, Macon.....	A. H. Foster.....	
Missouri:		
Central Wesleyan College, Warrenton.....	J. M. Rinkell.....	
Drury College, Springfield.....	Geo. B. Adams.....	
Fayette College, Fayette.....	Miss Mary E. Barnes.....	
Lewis College, Glasgow.....	Charles J. Peterson.....	
St. Louis University, St. Louis.....	Edward Hanhauser.....	2
St. Vincent's College, Cape Girardeau.....	Rev. H. Augustus Asmuth.....	
University of Missouri, Columbia.....	James Black.....	1
Washington University, St. Louis.....	J. K. Hosmer.....	
Westminster College, Fulton.....	C. C. Hersman.....	
William Jewell College, Liberty.....	R. B. Semple.....	
Washington University (Manual Training School).	Dr. J. Jinks.....	
Nebraska:		
University of Nebraska, Lincoln.....	Modern languages: Tutor, Lawrence Fossler; Professor, Frederick W. Grubé.....	
New Hampshire:		
Dartmouth College, Hanover.....	Instructor, John Henry Wright.....	
New Jersey:		
College of New Jersey, Princeton.....	Dr. H. Huss.....	
Seaton Hall College, South Orange.....	Fridolin Meyer.....	
Stevens Institute, Hoboken.....	Charles F. Kroch.....	
New York:		
Alfred University, Alfred.....	Mrs. I. F. Kenyon.....	
Cornell University, Ithaca.....	W. T. Hewett.....	*2
Hamilton College, Clinton.....	H. K. G. Brandt.....	
Hobart College, Geneva.....	Charles J. Rose.....	
Union College, Schenectady.....	Wm. Wells.....	
University of Rochester, Rochester.....	A. H. Mixer.....	
Vassar College, Poughkeepsie.....	Miss Minna Hinkel.....	
Wells College, Aurora.....	Miss Elsie Piutti.....	
Columbia College, New York.....	H. H. Boyesen.....	b1
Manhattan College, New York.....	No name given.....	
St. John's College, Fordham.....	Adolph Peterson.....	
St. Lawrence University, Canton.....	H. H. Liotard.....	
University of the City of New York.....	Dr. Chas. Carroll.....	
University of the State of New York.....	Dr. Adolph Werner.....	
Adephi Academy, Brooklyn.....	Instructor, H. J. Schmidt.....	

* H. S. White and T. T. W. Krueger.

b Dr. Wm. H. Carpenter.

List of colleges and their professors of German—Continued.

State and institution.	Professor of German.	Number of assistants.
New York—Continued.		
Onondaga Academy, Onondaga Valley	Charlotte Lalirent	
Rochester Free Academy, Rochester	A. Trzeciak	
Brooklyn College and Polytechnic Institute, Brooklyn	Horace M. Kennedy	
Clinton Liberal Institute, Clinton	William Gunn	
Albany High School, Albany	Dr. Leo H. Altmyer	
Angola Union School	Inez J. Ames	
Ilion Union School, Ilion	May F. Park	
Littlefalls Union School, Littlefalls	Dr. Henry H. Robert	
Syracuse High School, Syracuse	Miss M. F. Griffin	2
The Ithaca High School, Ithaca	Miss H. W. Thompson	
Lockport Union School	Jules G. Daudler	
Waterloo Union School	Geo. E. Hartman	
North Carolina:		
Rutherford College, Happy Home	Rev. Rob. L. Abernethy	
Trinity College, Randolph County	Rev. J. Franklin Heitman	
University of North Carolina, Chapel Hill	George Taylor Winston	
Davidson College, Mecklenburg County	J. F. Latrum	
Ohio:		
Adelbert College of Western Reserve, Cleveland	Arthur H. Palmer	
Baldwin University, Berea	Victor Wilker	
Buchtell College, Akron	Carl F. Kolbe	
Capital University, Columbus	Rev. F. W. Stelthorn	
Denison University, Granville	George F. McKibben	
Franklin College, New Athens	Robert Gowan Campbell	
Heidelberg College, Tiffin	Rev. A. S. Zerbe	
Kenyon College, Gambier	William T. Colville	
Marietta College, Marietta	E. E. Phillips	
Muskingum College, New Concord	Miss Mary Miller	
Oberlin College, Oberlin	Miss F. F. Rice	
Ohio State University, Athens	Miss Emily F. Wheeler	
Ohio Wesleyan University, Delaware	Dr. William W. Davies	
Otterbein University, Westerville	Josephine Johnson	
Rio Grande College, Rio Grande	President, Albanus A. Moulton	
St. Joseph's College, Cincinnati	F. Boeres	
St. Xavier's College, Cincinnati	Augustine Effiger	
University of Cincinnati, Cincinnati	James Morgan Hart	
University of Wooster, Wooster	John C. Boyd	1
Urbana University, Urbana	George W. Worcester	
Wilmington College, Wilmington	President, James Bryant Unthank	
Antioch College, Yellow Springs	Evelyn Darling	
Pennsylvania:		
Allegheny College, Meadville	C. W. Reid	
Augustinian College, Delaware County	P. M. Arnu	
Dickinson College, Carlisle	Dr. O. B. Super	
Franklin and Marshall College, Lancaster	Rev. Prof. J. H. Stahr	
Lebanon Valley College, Annville	Teacher, John F. Müller	
Muhlenberg College, Allentown	Rev. Wm. Wackernagel	
Pennsylvania College, Gettysburg	Rev. Adam Martin	
Pennsylvania State College	Charles F. Reeves	
St. Francis College, Loretto	Bro. De Sales Witmer	2
St. Vincent's College, Beatty	Rev. Gallus Hock	
Swarthmore College, Swarthmore	Wm. Hyde Appleton	1
Thiel College, Greenville	Rev. Herm. Gilbert	
University of Philadelphia	Dr. Oswald Seidensticker	
Ursinus College, Freeland	Rev. John v. Haagen	
Washington and Jefferson College, Washington	J. S. Simonton	
Western University, Pittsburg	Paul F. Rohrbacher	
Westminster College, New Wilmington	A. M. Paterson	
Pennsylvania Military Academy, Chester	Lieut. Emile L. Feffer	
Rhode Island, Brown University, Providence	Instructor, W. G. Crosby; modern languages, Alonzo Williams	
South Carolina:		
College of Charleston	Sylvester Primer	
Erskine College, Due West	J. I. McCain	
Newberry College	Dr. G. W. Holland	
University of South Carolina, Columbia	Edward S. Joynes	
Wofford College, Spartanburg	Jesse T. Littleton	
Tennessee:		
Carson College, Mossy Creek	T. C. Karns	
Cumberland University, Lebanon	John J. D. Hinds	
East Tennessee Wesleyan University, Athens	Mrs. A. C. Knight	
Maryville College, Maryville	Miss J. B. Smith	
Southwestern Presbyterian University, Clarksville	S. J. Coffman	
University of the South, Sewanee	F. M. Page	4
Vanderbilt University, Nashville	J. H. Watkins	2

List of colleges and their professors of German—Continued.

State and institution.	Professor of German.	Number of assistants.
Texas:		
Add Ran Star College, Thorp Spring	T. M. Clark	
Agricultural and Mechanical College, College Station	R. Wipprecht	
Baylor University, Independence	Instructor, Geo. Hamman	
Chapel Hill Female College, Chapel Hill	Instructor, Miss E. W. Parkman	
Marvin College, Waxahachie	Instructor, Miss Rosa McMillan	
Southwest University, Georgetown	R. F. Young	
University of Texas, Austin	E. Tallchet	1
Waco Female College, Waco	Instructor, Jno. C. Wiley	
Utah—University of Deseret, Salt Lake City	Alfred André	
Virginia:		
Randolph Macon College, Ashland	R. E. Blackwell	
Norfolk Academy, Norfolk	J. H. Dillard	1
Wisconsin—University of Wisconsin, Madison	Wm. H. Rosenstengel	1

The process of transformation begun during the last quarter of the century by the most advanced colleges in order to develop into universities in the German sense of the term, is not within the scope of this article and is therefore passed over; moreover, data relative to the separate institutions are given in the next part of this article. The action of Harvard, immediately followed by that of Columbia and Yale, opened the way. The process is not by any means completed, as the facts stated at the close of this section prove.

It may not be out of place to mention here that, in the meantime, in the year 1878, the German normal school planned for more than a half century, claiming an uninterrupted period of activity for more than twenty-two years, was eventually established with success. The history of the founding of this seminary and its subsequent results is contained in that section of this article which treats of normal schools. We need only mention here that Milwaukee possesses a similar school, the German-English Academy, with which a normal school for athletics is connected.

The merit not only of having founded, but of having organized this institute for active work is due to the National German-American Teachers' Association, in existence since the year 1870. The author has learned the following condensed facts respecting the purpose and success of the work of this association, which has striven for the following ends:

I. The introduction of kindergartens, according to the principles of Pestalozzi and Fröbel, which since 1870 have found greater and greater recognition on the part of Anglo-American educators. One of the first kindergartens was established by the association in Detroit. In Milwaukee a kindergarten and normal kindergarten are connected with the seminary.

II. The introduction of athletic instruction into the curriculum of public schools. In the cities where it is found its establishment is due to the efforts of the association, which received the warmest support from German athletic associations.

III. The introduction of instruction in manual training and hand work into public schools. It is generally known that instruction in athletics, manual training and hand work has long since been introduced into the schools of Germany. All advanced teachers agree to generalize this reform in America, in which country its favorable results have likewise been sufficiently proved.

IV. The association has always exerted the strongest efforts to replace the method of mechanical memorization formerly dominant in America by the German, which aims systematically to disclose the meaning of the subject of instruction and to develop the pupil's power of reasoning.

V. The association has always endeavored to do away with the preponderance

of women teachers, the crowding of classes, and the restriction of instruction to the traditional three R's.

VI. The association has finally endeavored to make clear to the public and professional mind the necessity of a normal education for teachers, the superintendence of schools by competent educators, and the value of instruction in more than one language, particularly the English and the German.

No more need be said of the former work of the association. The present president, Prof. M. D. Learned, published the following important article in the *Pedagogical Monthly*, of December, 1899:

THE "LEHRERBUND" AND THE TEACHERS OF GERMAN.

It is characteristic of the American people as an English speaking nation to ignore forms of modern culture which are not expressed in the English language. Accordingly, we find even college and university professors of German ignorant, not only of the character, but in many cases, even of the existence of the extensive literature which has been written in America in the German language, and of German organizations, and of German effort in general in this country.

The organization of German-American teachers known as "Nationaler Deutsch-amerikanischer Lehrerbund" has not received hitherto the cooperation of academic teachers of German which it deserves and invites. Now that the Association of Colleges and Secondary Schools has brought about more harmonious relations between academic and secondary teachers, and the attention of academic men has been drawn more and more toward the work of the National Educational Association, the time seems ripe for a closer affiliation between the "Lehrerbund" and the professors of German in American colleges and universities. Such an affiliation would be a further stage in the evolution of American education during the last three decades. The American Philological Association¹ first effected a union of the professors of languages, and reared, so to speak, the generation of modern language professors, who in the year 1883² formed a new organization for the furtherance of their more specific interests. Thus the Modern Language Association of America came into existence. In the course of a decade a need was felt for similar organizations within more limited territory, to facilitate the holding of meetings and to subserve the interests of the State or group of States in question. Thus originated the Modern Language Association of Ohio³ and the Central Modern Language Conference.⁴ Within the last five years a further differentiation has manifested itself in the formation of societies devoted more specifically to the interests of a single language—in this case, of German—thus giving rise to State organizations of teachers of German. So were formed the Association of Teachers of German in California,⁵ and the Association of Teachers of German in Pennsylvania,⁶ including teachers of German of all grades, and thus realizing in another direction one of the aims of the Association of Colleges and Secondary Schools.

In like manner there has been an evolution in the German organizations toward the same result. The first organization of German teachers in America, the "Lehrerbund," now in the thirtieth year⁷ of its existence, directed its attention for years to the exclusive interests of the lower and secondary schools, which formed in themselves, so to speak, a system of German instruction culminating in the foster-center of German teachers in America, the "Lehrerseminar" in Milwaukee. Within the last few years the Germans have awakened to the fact that they have made a great contribution to American culture, but that, while Americans have been appropriating German culture, going by hundreds to study at German universities, the German youths in this country have been discarding and even

¹ Organized November 13, 1868, at the University of New York, and including within its scope both ancient and modern languages and pedagogy. It is worthy of note that one of its prototypes was the German society, "Sammlung der deutschen Philologen und Schulmänner." (Compare proceedings of the "American Philological Association," I, p. 5 ff. 1860.)

² December 27, 28, at Columbia College. (Compare "Proceedings of the Modern Language Association of America" for 1884, p. 1 ff.)

³ Organized 1890.

⁴ December 30, 31, and January 1, 1895-96, at the University of Chicago. (Compare "Publications of the Modern Language Association." 1896, p. Ivii ff.)

⁵ Compare *Americana Germanica*, I, 3, 104.

⁶ April 9, 1898, at the University of Pennsylvania. (Compare *Americana Germanica*, II, 2, Reprint 19.)

⁷ The thirtieth annual meeting (Lehrertag) takes place in Philadelphia, Pa., at the close of the school year 1899-1900.

despising the "Muttersprache," thus imperiling the future of the German language and life in America. Accordingly, these Germans have organized the American-German League,¹ one of whose avowed objects is the cultivation of the German language in America. Every possible effort is being made by them to improve the teaching of German in both German and English schools, not to the exclusion of English, but simultaneously with it. All these forces—the "Lehrerbund," the associations of teachers of German in the various States, and the American-German League—have mobilized and lined up with the associations of academic professors in the cause of modern language instruction, in this case, in the cause of German in the schools. It is at this juncture that the old organization of German teachers in America, the "Lehrerbund," takes another step forward by inviting the cooperation of the entire body of German teachers and teachers of German from the kindergarten to the university to join in one united effort to win for German in the schools that recognition which its importance in American culture demands.

In the cultural development of America, German influence has played a most important part, and bids fair to continue for a long time the foremost foreign influence in American life. Americans have long been divided, in their estimate of the value of this influence, into two parties. The German-born American, as well as many born here of German parentage, insist upon the preservation of German speech and German customs, both in public and private life. Accordingly, they maintain German churches, German schools, German clubs, and other German forms of social life. The extremist of this party goes still farther and advocates that German be taught in the public schools and be employed as a medium of all instruction in those schools whose pupils come from German families. This has resulted, in some cities, in the organization of German public schools for German children. Others, who are less extreme, are content to see German taught in the primary schools during certain periods, with German as the medium of instruction during these periods. To this latter class of the pro-German party belong many English teachers of German.

The other party is the native Anglo-American population, who insist upon "American (English) for Americans." They oppose everything foreign in the schools, particularly everything German; they oppose the German language and the German school; they disapprove of the German church, ignore the influence of German culture, and look with disfavor upon the inroads of German industry and trade. Happily, the extreme representatives of this jingo spirit are not the most influential in directing the deeper cultural processes of America. The more moderate class of this party represent the educators of the land who recognize the importance of German culture in our life, and of the German language as a discipline in American education. Through the efforts of this class German has been introduced as an essential language in the college and university, and is now fast finding its way into the curriculum of the secondary schools, particularly high schools. While this class of educators recognize the cultural value of German, they insist upon English as the medium of instruction. They do not approve of public schools conducted exclusively in a foreign language, and deprecate the segregation of foreign-born citizens in certain districts of country or city for the preservation of foreign forms of life. To this moderate class of the pro-American party belong some of foreign extraction, and a few even of foreign birth.

It is clear to the unpartisan observer that the permanent interests of both extreme wings lie along the line of a compromise between the moderate classes of each party—in a word, in the cultural elevation of our American youth through the best educational means which Germany and America can provide.

The best corroboration of this view is the fact that the highest and best preserved forms of German life in America are to be found in those German communities which represent the highest culture and most liberal ideas. It is in German communities representing the uneducated classes that we find the German element so objectionable, not only to the English population, but to the better German classes as well. It is in them, too, that we find that immovable German conversation which has made them impervious to modern culture.

The educated German classes and the academic men in America understand and appreciate the significance of these facts. The professors in our universities and colleges and of the better secondary schools understand the problems which confront the Germans among us better than any other class of Americans. In fact, this educating class have actually built up in America, for the most part unconsciously, a "Gelehrtenrepublik," which furnishes a prototype of what the German

¹ October 3, 1898 at the "Halle der deutschen Gesellschaft" in Philadelphia, Pa. The first aim of the league is "die Einführung des deutschen Sprachunterrichts als einen Zweig des Lehrplanes in den öffentlichen Schulen."

in America might well aspire to become. This republic of teachers, composed of Germans of both native and foreign birth who have assimilated the best of American culture, and of Americans who have appropriated the best German culture, is the best conservator of true, lasting, German influence in America, as in it the two cultures are harmoniously combined.

Academic teachers have hitherto directed their efforts mainly toward the more technical pedagogical side of German teaching in our schools, giving only incidental attention to the larger problem of what German influence is to do in shaping American life and institutions or of what must be the ultimate effect of the German and American culture persisting side by side in America with little or no affiliation between them. A glance at such a state of things must show that a continuation of such conditions would prove detrimental both to Germans and Americans. Two hundred years of German history in America have demonstrated that the best results of German effort have followed the higher activity in the domain of education, art, statesmanship, and international trade—in a word, in those departments of life in which the German has come into close touch with the native American. In like manner, three centuries of English history in America have taught that the greatest epochs of cultural development have been those in which there was a strong infusion of foreign influence in American life, as was in the case of French the present century.

The educators of this country should no longer remain mechanical pedagogues, looking only to the tasks of the day. They must look forward into the future to the probable results of the coalescing of German and American forms of culture in our national life. It is not sufficient that the college or university professor content himself with teaching the principles of the language and the outline history of the literature. He must mediate between the two great cultures and infuse the stimulus of German thought into the American mind in such intelligent wise that a new and higher intellectual life shall follow. The academic professor should, moreover, try to unfold to the American student and to the American people, through the medium of German thought, a new kinship of the Teutonic races, and thus broaden the horizon of his countrymen, enrich their cultural resources, and thus lay the foundation of a new epoch in American literature.

In the cooperation of the German and American in our national education lies the possibility of an even higher form of linguistic and literary scholarship, and a higher cultural ideal. No teacher of German should permit his students to rest satisfied with a bare reading knowledge of German. Much less should any teacher venture, or any school board allow, a teacher to teach German without the ability to speak and write that language with reasonable facility. It is a well-known fact that while the universities of the land are requiring a sight-reading knowledge of German and French, even of candidates for the degree of doctor of philosophy in any science, many of our high schools, and even colleges (be it said to their shame), are employing teachers who can not so much as pronounce correctly the foreign language which they are supposed to teach. It is high time that this state of things had become an impossibility in all departments of modern languages.

The one point upon which academic and secondary teachers in America should now concentrate their energies is the elevation of the secondary teaching into a profession, requiring the same vigorous preparation as the strictly academic career. In order to accomplish this a number of preliminary steps are necessary:

1. *A uniform system of education.*—Regulating the curricula and methods of all schools, public and private, which will guarantee the continuity of educational effort throughout all grades of instruction.

2. *The emancipation of education from politics.*—Some of our Western States seem to be rising to that dignity of statehood which protects the schools from the toils of political intrigue. This is unfortunately not the case with a number of the original thirteen.

3. *The State recognition of the importance of experience and skill in the lower and secondary schools.*—The disgrace of our public schools has been that they have been made recruiting stations for other professions. The student of law, medicine, or theology teaches school till he can save money enough to quit this business for his chosen profession. The young woman waiting, not like Micawber, for something to turn up, but for some one to turn up, teaches school as a temporary makeshift.

These conditions once fulfilled, the elevation of school-teaching to a profession follows of necessity.

This, then, is the work which clamors for the cooperation of all academic and secondary teachers of German—that the language, wherever it is taught, should be taught correctly and intelligently by trained teachers who are willing to make it their life work.

Toward the accomplishment of this result the "Lehrerbund" offers:

1. The advantages of a thoroughly organized association, with the experience of thirty years, during which time it has accumulated a vast amount of valuable material, which has been published in the official organ, recorded in the "Protokoll," or transmuted into improved methods. It has a creditable standing in America and is in close touch with European education.

2. An opportunity, especially at the annual meeting (Lehrertag), to promote mutual acquaintance between German teachers and teachers of German of all grades and to discuss questions of vital interest.

3. A definite plan for the improvement of the teaching of German in the schools by advocating (a) a thorough speaking knowledge of German on the part of all teachers of the language; (b) the introduction of a full course of four years of German in the high schools; (c) the teaching of German in the lower grades as far as it is advisable; (d) the use of German as the medium of instruction where the conditions will permit; (e) the emphasizing of a careful use of German in the German home, in order to preserve the purity of the idiom in America, and to secure to the youth of German extraction the bilingual advantages to which the accident of birth entitles them.¹

4. A well-equipped "Lehrerseminar," which devotes itself to the training of primary and secondary German teachers, eliciting the attention of academic men by the thoroughness of its work. There are in this institution greater possibilities, which might result in the development of a National German-American Normal School in the higher and ideal sense of the term (such as none of our normal schools has yet been or bids fair to become), a "Pädagogium," supplementing the work of the colleges and universities, and forming a recruiting station for teachers who already hold the degree of A. M. or Ph. D., and aspire to permanent careers in the high schools and secondary schools of the land.

5. A medium of publication, through its official organ,² open to all teachers of German for the interchange of views touching methods, books, administration, and other vital subjects. Here the elementary, secondary, and academic teacher will find an opportunity to discuss text-books and other literature relating to the schools and to make original contributions to American education. The official publication of the "Lehrerbund" welcomes such contributions from teachers of every grade. The closest touch with European schoolmen will be aimed at, and can not fail to prove a source of stimulus.

6. The greatest thing the "Lehrerbund" offers is the opportunity of cooperation between the hitherto rather exclusive German teachers and their altogether too indifferent English-speaking colleagues, thus opening the way to a harmonious union of educational forces which must lead to a better understanding and to a well-organized system of national education. It is, after all, the teachers of America who are the medium of cultural intercourse and of friendly feeling between Germany and America; and the closer the relation between the German and English teachers of America, the more generous will be the sympathies between them. Both will be more intelligently loyal Americans, and both will contribute to a more intelligent friendship between the German Empire and the American Republic. This is a task not for the ephemeral jingoistic press, but for the slower and surer processes of national education.

This publication, not widely enough known, by an Anglo-American professor, is manifestly a bridge between the efforts of Germans who esteem their native language in America and do not wish to disclaim their national individuality, and those of the most intelligent Americans who recognize in the German language, German literature, and German science factors of culture that are, in the course of time, to become more effectual means still in the progress of American civilization than they have been in the last two centuries. It is to be hoped that, in this way, a new era in the history of German-Americanism will be introduced, characterized by an intense interest in German at all the better educational institutions of the country.

The establishment of special "German departments" at American universities and colleges of high rank is evidently an important step in this direction. Again Harvard University is among those which led the way, especially as the reform

¹The general attitude of the "Modern Language Association" on some of these points is set forth in the Report of the Committee of Twelve, just issued by the Bureau of Education at Washington.

²The old organ, "Erziehungsblätter," was discontinued in the spring of 1899, and the first number of the new organ, "Pädagogische Monatshefte," continues the work on a different plan.

was undertaken in the consciousness of thus "contributing to the appreciation of German ideals in America." In a short article on this subject, prepared for the Chicago Exposition, we read:¹

During the whole time from Follen's withdrawal (1835) till the appointment of Professor Hedge (1872) the department was in a stagnating condition, and even while the latter was in office it suffered from an insufficient corps of teachers and limited aims. Gradually, however, a change was effected by the appointment of a number of teachers who, although they represented a great diversity of interests in the history of literature and philology, still felt united in the effort of making German ideals appreciated in America. The German department at Harvard thereby attained a degree of development and excellence in that line which entitles it to the right of special esteem on the part of the German-American population and all those interested in the promotion of German study.

The "German department" of Harvard is the largest and most capable of all. It has a staff of five professors, seven instructors, and several lecturers, who teach as many as 1,200 students. The details of the most recent plan of study and all other interesting facts are contained in the following section, in which special references to the German departments of other important institutions are given. An examination of them will show what astonishing progress has been made in the short space of sixteen years since the above-quoted inquiries of the Modern Language Association on the position of German instruction in the country were made.

The introduction of German instruction into the highest educational institutions reacts in a decided manner upon secondary schools, which for the most part prepare future students of colleges. We have seen this exemplified in the development of the educational system in Michigan. President Eliot adduces the proof that every advancement in the conditions of admission to his university "has been followed by a corresponding advance in the instruction of all the high schools of Massachusetts."² Numerically the greater significance which German instruction has attained is shown by the following proportion of pupils who study German in public and private high schools, which will be given with more detail further on: In 1889-90 there were 34,208, or 11.48 per cent of the total, studying German; in 1897-98 there were 78,994, or 14.24 per cent; in 1900-1901 there were about 100,000, or about 20 per cent.

What has been said shows how very important for our subject the efforts of late years have been to establish uniform conditions of admission for colleges, and to assure thereby a firm position for German in the curriculum of all higher educational institutions as in that of secondary schools. Efforts have been made from the middle of the eighties to have uniform rules framed relative to elementary and higher German, to be observed by college applicants. At the instigation of the Massachusetts High and Classical School Teachers' Association the faculties of fifteen different colleges in New England appointed a committee in the year 1886 to prepare theses on this subject.³ They read as follows:

¹ The department for German literature and philology at Harvard University, Cambridge, Mass. Harvard University edition, 1893, pp. 4, 5.

² Compare Transactions of the Modern Language Association, Vol. I, p. 26.

³ At the seventh annual meeting of the Modern Language Association (1889) these theses were minutely discussed, and on the whole received favorable judgment. On this occasion, Professor White stated that a "modern-language diploma" would be introduced at Cornell. In addition, he made the following statement: "In New York State a large 'literary fund' is distributed to the academies and high schools in proportion to the number of regents' examinations which the students of such institutions may pass during the year, so that each academy and high school will have a certain financial interest, too, in promoting the study of French and German. This movement is regarded in New York as of great moment, and it seems fortunate that the same effort should be now under way in New England." At Harvard, admission examinations in French and German have been held since 1887, and modern languages have been on a par with all other subjects of examination.

A PROPOSED SCHEME OF UNIFORM ELEMENTARY AND ADVANCED REQUIREMENTS IN GERMAN AND FRENCH FOR ADMISSION TO COLLEGE, DRAFTED BY A COMMITTEE ON ADMISSION EXAMINATION APPOINTED BY THE COMMISSION OF COLLEGES IN NEW ENGLAND.

ELEMENTARY GERMAN.

1. Proficiency in the following topics of elementary grammar: declension of such nouns as are readily classified, of adjectives, and pronouns; conjugation of weak and of the more usual strong verbs; simple cases of word-order.

2. The candidate must have read not less than 200 duodecimo pages of easy German—chiefly narrative prose, with a few lyric poems.

3. Ability to pronounce German and to recognize German words and simple phrases when uttered.

ADVANCED GERMAN.

1. Proficiency in more advanced grammar. In addition to a thorough knowledge of accidence (including the elements of word-formation) and of the principal values of prepositions and conjunctions, the candidate must be familiar with so much of syntax as is necessary to an understanding of the use of modal auxiliaries, of the subjunctive and infinitive moods, and of word-order in connected discourse.

2. Ability to translate ordinary German, to be acquired by the reading in addition to the elementary requisites of the following works: *Deutsche Liebe* (Müller); *Höher als die Kirche* (Hillern); *Die Journalisten* (Freitag); *Peter Schlemihl* (Chamisso); *Die Harzreise* (Heine); *Minna von Barnhelm* (Lessing); *Die Jungfrau von Orleans* (Schiller); *Egmont* (Goethe), and 30 pages of lyrics, including Schiller's *Lied von der Glocke*.

3. Composition and conversation, presupposing familiarity with the subject-matter and vocabulary of *Höher als die Kirche*, *Die Journalisten*, and *Die Jungfrau von Orleans*.

It is proposed that the works assigned be changed from time to time by a committee to be appointed by the professors of modern languages in the colleges represented in the commission.

The author does not know what tangible practical results followed upon this beginning. At all events, it paved the way for action. The decisive step was taken February 1, 1896, when representatives of the six large eastern colleges: Harvard, Yale, Columbia, Cornell, Princeton, and the University of Pennsylvania, together with those of secondary schools, came together in the halls of Columbia for a "German conference." The result of this conference is contained in the following concise and important report:

MARCH 4, 1896.

DEAR SIR: The members of the German conference held at Columbia University for unifying the present entrance requirements at the six colleges represented, adopted, by a unanimous vote, each paragraph of the subjoined elementary and advanced requirements, and have since unanimously adopted the requirements as a whole.

In elementary German—(a) The rudiments of grammar, and especially these topics: The declension of articles, adjectives, pronouns, and such nouns as are readily classified; the conjugation of weak and of the more usual strong verbs; the commoner prepositions; the simpler uses of the modal auxiliaries; the elementary rules of syntax and word-order. The proficiency of the applicants may be tested by questions on the above topics and by the translation into German of simple English sentences. (b) Translation at sight of a passage of easy prose containing no rare words. It is believed that the requisite facility can be acquired by reading not less than 200 duodecimo pages of simple German.

Practice in pronunciation, in writing German from dictation, and in the use of simple German phrases in the class room is recommended.

Preparation for the elementary requirement need not call for more than one year's instruction of five periods per week.

In advanced German—(a) More advanced grammar. In addition to a thorough knowledge of accidence, of the elements of word formation, and of the principal uses of prepositions and conjunctions, the candidate must be familiar with the essentials of German syntax and particularly with the use of modal auxiliaries and the subjunctive and infinitive moods. The proficiency of the applicant may be tested by questions on these topics and by the translation into German of easy connected English prose. (b) Translation at sight of ordinary German. It is believed that the requisite facility can be acquired by reading, in addition to the

amount mentioned under elementary German, at least 500 pages of classical and contemporary prose and poetry. It is recommended that not less than one-half of this reading be selected from the works of Lessing, Schiller, and Goethe.

It is recommended that the candidate acquire the ability to follow a recitation conducted in German, and to answer in that language questions asked by the instructor.

Preparation for the advanced requirement need not call for more than two additional years of instruction.

All of which is respectfully submitted.

HORATIO S. WHITE, *Chairman.*
WM. H. CARPENTER, *Secretary.*

President SETH LOW, LL. D.,
Columbia University.

The subject was afterwards further advanced by the National Educational Association and the Modern Language Association. The former has aimed for some time to bring about a better regulation of secondary instruction in the subjects usually required for admission to American colleges. In matters pertaining to instruction in modern languages it appealed to the latter body to prepare practical propositions. At the annual meeting in 1896 the Modern Language Association appointed Prof. Calvin Thomas and commissioned him to form a committee of twelve to comply with this request thoroughly.

The committee of twelve of the Modern Language Association of America met in the beginning of the year 1897. It consisted of the following gentlemen: Calvin Thomas, Columbia University, chairman; E. H. Babbitt, Columbia University (at present University of the South); H. C. G. Brandt, Hamilton College; B. L. Bowen, Ohio State University; W. H. Carruth, Kansas University; S. W. Cutting, University of Chicago; A. M. Elliott, Johns Hopkins University; C. H. Grandgent, Harvard University; G. A. Hench, University of Michigan (since deceased); Hugo A. Rennert, University of Pennsylvania; William B. Snow, Boston High School; B. W. Wells, University of the South.

The committee prepared a circular that was sent to about 2,500 teachers. The object of the circular was to obtain information with regard to the present status of secondary instruction in French and German in the country at large and also to elicit opinions with respect to a number of more or less debatable questions which, as was thought, would be likely to arise in the course of the committee's deliberations. The answers received, which numbered several hundred, were a perfect chaos of opinion respecting the value of German instruction, the number of courses and their extent, the number and length of hours of instruction, and the requirements of admission examinations.

The committee realized the necessity of conservative measures the more, as colleges could never be forced to accept the propositions submitted. No attempt was to be made either to decide which of the various competing courses was the best course or to antagonize any particular study. Finally the fact was perfectly understood that it is not the main purpose of secondary schools to prepare their pupils for college, but that "the great majority of those studying the modern languages in school do not go to college at all." Our secondary education must be recognized as having its own function, its own aim and ideals.¹

¹In an address delivered by Dr. Frank A. Hill, Litt. D., secretary of the Massachusetts Board of Education, July 11, 1894, at the sixty-fourth annual meeting of the American Institute of Instruction, we find the following pertinent statements: "The high school is the people's college. It has a threefold duty: It should give its pupils a good training for their own sakes; it should furnish good material for the normal schools as for the colleges, and it should inspire and lift up the schools below; therefore it should be held up itself."

The same speaker asserted that of the 247 high schools considered in the celebrated "Report of the committee of ten on the course of study of secondary schools," only 146 had college preparatory courses. Accordingly, it would be an altogether impossible demand of secondary schools to arrange their course of study exclusively for preparation for college.

The propositions of the committee relative to German were published in full in the Report of the Commissioner of Education for the year 1897-98, pages 1409-1421. The following summary will therefore suffice:

Three preparatory courses, namely, elementary, intermediate, and advanced German, are recommended for secondary schools. The elementary course, designed for a term of two years, should enable a pupil to pass the admission examination in elementary German wherever German is required as a third language, in addition to Latin and Greek.

In the first year the pupil should be drilled in pronunciation, etymology, and the chief rules of syntax, besides the phrases of daily occurrence, and 75 to 100 pages of easy text should be read. In the second year the knowledge of grammar should be extended, easy prose translated into German, and 150 to 200 pages of selected passages from German literature (narrations and comedies) read.

The intermediate course in German, with a term of three years, should enable a pupil to read at sight German prose of ordinary difficulty, whether recent or classical; to put into German a connected passage of simple English, paraphrased from a given text in German; to answer any grammatical questions relating to usual forms and essential principles of the language, including syntax and word formation; and to translate and explain a passage of classical literature taken from some text previously studied. About 400 pages of moderately difficult prose and poetry should serve for reading. This course is designed for those who do not intend to study Greek, and are therefore required to accomplish much more in German than the conditions of admission.

Finally, the advanced course in German, with a term of four years, should enable a pupil to read, after brief inspection, any German literature of the last one hundred and fifty years that is free from unusual textual difficulties; to put into German a passage of simple English prose; to answer in German questions relating to the lives and works of the great writers studied, and write in German a short, independent theme upon an assigned topic. About 500 pages should be read from such works as the following: Scheffel's *Ekkehard*, Freitag's *Soll und Haben*, Goethe's *Egmont* or *Götz von Berlichingen*, the *Sesenheim* episode from *Dichtung und Wahrheit*, Wallenstein's *Lager*, Wallenstein's *Tod*, the third book of Schiller's *Thirty Years' War*, Emilia Galotti, and Kleist's *Der Prinz von Homburg*. Appropriate works of Grillparzer, Körner, Heine, Tieck, Sudermann, and Wildenbruch may likewise be made use of.

On principle the committee did not consider any answer to the question as to whether German should be introduced into primary schools or retained in the many cities in which it is already taught. "The question in its politico-social bearings is a very large one, but it is a question which every community must and will decide for itself in view of local conditions." In general the following principles were proposed:

I. Instruction in foreign languages should never be made compulsory, but should only be given upon expressed desire.

II. The study of a foreign language should be taken by only those primary school pupils who intend to continue it in a secondary school. The reason for this is that it is impossible to acquire a sufficient practical knowledge of a foreign language in a primary school. It is very true that children learn the beginning of "conversation" in a foreign language quickly and easily, but they forget what they learn just as readily. It may be of some advantage to children whose parents speak German regularly at home to receive elementary instruction in German, "but if they leave school at the age of 12 or 14 they inevitably drop back into the speech habits of those with whom they associate, and their school training becomes, so far as the German language is concerned, a reminiscence of time wasted. The children of parents who speak English at home get a smattering of German at

school, but if they leave school at the age of 12 or 14 they soon forget all they have learned."

III. German instruction should be given in the primary grades only by teachers who have a thorough command of the language, and they should teach a small class regularly every day. "Infrequent lessons in large classes amount to nothing. It is important that the teacher know his pupils intimately and be able to adapt his instruction to their individual needs. The general aim should be to familiarize the learner with the vocabulary and phraseology of the spoken language and to teach him to express himself readily and correctly in easy sentences."

This report, which deserves to be called a worthy supplement to the above-mentioned similar report of the committee of ten on the course of study of secondary schools, was presented at the annual meeting of the Modern Language Association held in Charlottesville, Va., December, 1898, and at the annual meeting of the National Educational Association held in Los Angeles, Cal., the following summer. On both occasions it was received with extraordinary approval. The consequence was that on December 22, 1899, President Seth Low presided at a most important convention of representatives of colleges and secondary schools who met in the halls of Columbia University to establish a "college entrance examination board." This was definitely constituted November 17, 1900, as follows: Barnard College, Acting Dean Robinson; Bryn Mawr, President Thomas; Columbia University, President Seth Low; Cornell, Prof. Horatio S. White; Johns Hopkins, Professor Griffin; New York, Chancellor MacCracken; University of Pennsylvania, Professor Lamberton; Rutgers College, President Scott; Swarthmore College, President Birdsall; Union College, President Raymond; Vassar College, President Taylor; Woman's College, Baltimore, Professor Von Meter.

The following representatives of secondary schools were members of the board: Dr. Julius Sachs, New York; Dr. Edw. I. Goodwin, New York; Dr. Walter B. Gunnison, Brooklyn, N. Y.; Dr. Wilson Ferrand, Newark, N. J.; Charles I. Crossman, Haverford, Pa.

The officers of the board were: President Seth Low, chairman; President Thomas, vice-chairman; Prof. Nicholas Murray Butler, secretary and executive officer.

The executive committee was composed of President Seth Low, President Thomas, President Taylor, Professor Lamberton, Dr. Sachs.

On May 12, 1900, it had been decided with respect to German instruction that the requirements in German follow the recommendations of the committee of 12 of the Modern Language Association. These demands, therefore, need not be repeated. On the other hand, however, the resolution is deserving of mention that the uniform examinations should go into effect June 17, 1901. What effect this important step will have on the other institutions of the country is apparent from a statement in the *Educational Review*¹ to the effect that at their last meeting the New England Association of Colleges and Preparatory Schools authorized the appointment of a strong committee to take into consideration a similar plan for the colleges of that territory.

In a union of American universities, founded in Chicago, April, 1900, the first step was taken toward a permanent organization of all first-class educational institutions in the country. The first measures were taken by the University of California, whose president, Mr. B. I. Wheeler, presided at the conference in question, whilst all arrangements were in charge of President Harper of the University of Chicago.

The following universities were represented: University of California, Berkeley, Cal.; Catholic University of America, Washington, D. C.; University of Chicago; Clark University, South Atlanta, Ga.; Columbia University, New York City;

¹ December, 1900, page 536.

Cornell University, Ithaca, N. Y.; Harvard University, Cambridge, Mass.; Johns Hopkins University, Baltimore, Md.; State University of Michigan, Ann Arbor, Mich.; University of Princeton, Princeton, N. J.; University of Pennsylvania, Philadelphia; Leland Stanford Junior University, California; State University of Wisconsin, Madison, Wis.; Yale University, New Haven, Conn.

These 14 institutions, as charter members, founded the Association of American Universities, for the purpose of a common consideration of all matters pertaining to university studies and the adopting of a common attitude on all pertinent questions. As soon as practicable, this association is to embrace all higher institutions claiming the title of university, and all universities proposed at the annual meetings by the executive committee are to be admitted as members upon a favorable vote of three-fourths majority. Each university has but one vote, without regard to the number of its delegates. The association takes no active part in the politics of the separate higher institutions, as all "control" on its part is prohibited.

The president of Harvard University, Charles W. Eliot, was elected president; vice-president, Benjamin I. Wheeler (California); secretary, William Rainey Harper (Chicago). Besides these Messrs. Seth Low (Columbia) and Daniel C. Gilman (Johns Hopkins) belong to the executive committee. It remains to be seen to what extent the new association, which will probably hold its second annual meeting in Chicago, intends to promote the most immediate aim of educational reform—i. e., uniformity of entrance conditions for the freshman class. That this question is ripe for consideration is a tangible fact. On April 18 and 19, 1900, the representatives of Catholic colleges in the country held a meeting in Chicago, at which Monsignor Conaty, president of the Catholic University of America, presided, for the purpose of bringing about united action. To effect a uniformity of entrance examinations, a committee was appointed which is to present its report during Easter time, 1901.¹

Three years ago, President Charles K. Adams, of the University of Wisconsin, delivered a noteworthy lecture on "State Aid to Higher Education,"² in which he foretold that the present chaos would be soon followed by a new order of affairs. He says:

It follows that the colleges and the universities are coming more and more to regard themselves as the natural continuation of the high schools in much the same sense as the German university is the natural continuation of the *realschule* and the gymnasium. Under the impulse of this belief the chaos that has hitherto prevailed in our educational systems is gradually giving place to systematic organization, and we are coming to have some approach to what may fairly be called an organic educational system.

One thing is beyond all doubt, that in this organic educational system which is just forming German instruction will assert a position that can never be taken from it. As in the course of time all higher educational institutions, without exception, will be forced to conform to the uniform entrance conditions of the leading institutions, so those colleges in which German at present receives little or no attention will be compelled to give it the place due to it in their course of study.

A final step would be to make an elementary knowledge of German obligatory upon all applicants, in order to free colleges and universities of the burden of giving a part of their students the first training in this direction. That this step is by no means a dream whose realization is not to be thought of is proved by the following circular of the Association of Teachers of German in California, addressed to the superintendents of the California high schools;

SAN FRANCISCO, CAL., *May 10, 1897.*

DEAR SIR: The Association of Teachers of German in California, which is composed of the professors of German in both universities and of teachers of German in

¹ For this report see Chapter XVIII, Third Annual Conference of the Association of Catholic Colleges of the United States.

² February 22, 1898, at the Twenty-second anniversary of the Johns Hopkins University.

various high schools and private institutions of this State, recently made an investigation of the condition of the instruction in German in our secondary schools, resulting in the discovery that only in 35 of the 86 high schools is the German language taught at the present time. It became evident, further, that of 7,163 pupils who are taught in these 35 high schools only 918, or less than 12 per cent, were taking German, while all of the 7,163 pupils receive instruction in Latin, although but one-third of this number would probably afterwards enter a university.

In view of these facts, the Association of Teachers of German in California, being convinced of the great educational value of the study of German, begs to call your attention to the following considerations:

There are, in the first place, numerous practical reasons which speak for a speedy introduction of German in the high school curriculum. Owing to the large percentage of the German population of this country, and owing to the constantly increasing commercial relations between America and Germany, a knowledge of the German language is invaluable for business purposes. In all the large business centers of our country young men and women who command the German language are usually preferred when seeking positions to those who do not understand German.

It is, moreover, a well-known fact that professional men, like lawyers and physicians, profit likewise from a practical knowledge of German; and there is no reason why our high-school graduates, after they have been instructed in German by a competent teacher for a period of three years, should not gain a speaking knowledge of this language, and thus be enabled to avail themselves of the great practical advantages resulting from such a knowledge.

But the purely educational value of the study of German must be considered as equally great, especially for those high-school graduates who enter the university. There is at the present no branch of science in which Germany does not indisputably take the foremost place among the European nations, and a reading knowledge of German is therefore indispensable for the student in every department of university study. As a consequence, in all of the leading universities of this country German can be substituted for entrance in place of one of the ancient languages, President Gilman, of Johns Hopkins University, explaining this policy best by saying, "As Latin was during the middle ages the language of scholars, so the knowledge of German is now indispensable for anyone claiming the name of a student and scholar."

Comparing the secondary education of California with the progressive movements in the Eastern States, the Association of Teachers of German believes that hitherto undue preference has been given to the study of Latin in our high schools. While the knowledge of Latin will always remain invaluable for those entering special professions, it is comparatively of little benefit to the great mass of high-school pupils, who later on follow the practical pursuits of life. The mental drill claimed for the study of Latin may be derived in the same measure from a thorough study of the German language, which at the same time opens to the student a literature that in wealth of the most advanced thought and in beauty of expression can only be compared with the literature of the Greeks. Our English tongue is, moreover, in its formations and structure, essentially a Germanic language, and it is of far greater educational value for the majority of high-school pupils to study the historical growth of their own language in comparison with the closely related German than to learn the rudiments of Latin, which in most cases are only forgotten, because a proficiency in reading Latin can never be attained by the high school.

At the recent meeting of the California Teachers' Association a resolution was passed recommending that the study of German be placed on an equal footing with Latin in the high schools of California. The Association of Teachers of German in California believes that it is advocating the cause of higher education in the State by submitting this resolution herewith to your kind consideration, asking you at the same time to introduce the study of German in the high school of your district and to make German elective with Latin. The great importance of the study of German is being recognized more and more by the various departments of the University of California, and it is the opinion of the Association of Teachers of German in California that it is presumably only a question of time when the University will officially make German one of its entrance requirements.

Respectfully

JULIUS GOREEL,
President, Stanford University, California.
 H. E. F. UNGERTH,
Secretary, Alameda, Cal.,
Association of Teachers of German in California.

This circular was followed by a second, dated April, 1900, in which a committee composed of Prof. Julius Goebel, Prof. Henry Senger, and W. Zimmermann, appointed by the Teachers's Association, submitted to high-school superintendents a detailed plan of study for a proposed three years' course in German. As we learn from a letter of Professor Senger, quoted below, the number of high schools that have introduced German in pursuance of the above recommendation is rapidly increasing.

The efforts that tend to the obligatory German examination for entrance to college have received no little support from the recent international pedagogical movement toward substituting modern for classical languages as general subjects of instruction, a movement which has received its scientific indorsement from Prof. Dr. Fr. Paulsen, of the University of Berlin, Germany, in his highly important work, *The History of Scientific Instruction*. Such a radical change in the higher educational institutions is undoubtedly far off, but in all probability the compromise will gradually become familiar which sacrifices the Greek "fetic" on the altar of the common good and brings German into the foreground, a measure which Professor Goebel warmly advocates.

In the June number of the *Atlantic Monthly* of 1900 William Cranston Lawton treats this subject in an article entitled *A Substitute for Greek*.

Before Lawton proceeds to his subject proper he presents the following three theses, according to which the value of every study in primary and high schools is to be estimated:

I. Every study should aim to form good citizens, for only such can do their part in the intellectual development of mankind.

II. No study should be so managed as to overburden the mind by mechanical memorizing. It should serve to strengthen it.

III. Of whatever kind the study may be it must prepare for life and for no other purpose.

Proceeding from these views, Lawton decidedly advocates replacing Greek by German in our high schools and universities. He is of opinion that German should be considered the most important foreign language in the course of study and that Latin should be second in order. A child should begin the study of German not later than in his tenth year. Lawton considers the beauties and artistic worth which pupils can find in German poetry much more important than the knowledge which Greek text-books afford, and he thinks that every child 14 or 15 years old ought to know hundreds of gems, as, for instance, the ballads of Uhland, by heart. Lawton asserts that a living language is much more easily mastered than the "fragments of a dialect that has been dead for a long time." The German language should be placed first in order also because the most prominent learned men make use of it. He attacks those teachers in cutting terms who do not recognize any education as classical unless the study of Greek forms a part. "A man," says Lawton, "who knows nothing of Blass or Brueggemann, Mommsen or Boeckh, Furtwaengler and Doerpfeld, Roscher and Ivan von Mueller, is not justified in boasting of classical education. If he does not know his deficiency in education, he is so much the worse off. He on whose desk no German books are to be found can not be numbered among the learned." The history of civilization, Latin, and German should, in Lawton's estimation, be the three chief branches in every course of study of our high schools. He believes that the perception of the relationship of all civilized nations should form the foundation of our own school system, and that the German language and German science, together with the "history of Anglo-Saxon races," should be the most important element in the course of study of American schools.

Lawton favors pointing out the beauties contained in the works of poets to children, and he believes that learning poems by heart is of more value to the development of mind and character than the mechanical memorization of whole pages out of text-books. To him the knowledge of modern writers and the understand-

ing of their beauties is far more important than a drilling on the five variations of the verb "to be" in Homer, and it seems enough to him if pupils are instructed in the beauties of Greek mythology and poetry by their teacher of history.

Lawton hopes that the time may not be far distant when Greek will be excluded from the course of study of high schools. If for reasons of principle there should be any hesitation in taking such a step, practical reasons will effect the desired change, as it is no longer a rare occurrence to find only two or three pupils in the Greek classes of the large high schools.

The study of Greek may be safely confided to the old colleges; in the "people's college" of the twentieth century, however, German will take the place of Greek, and all who desire to attend a university in the future must have at least an elementary knowledge of this important language.

PART II.—THE POSITION OF GERMAN INSTRUCTION AT THE BEGINNING OF THE TWENTIETH CENTURY.

In the following account special stress is laid upon colleges and universities for the following reasons:

I. Colleges and universities are, undoubtedly, leading educational institutions, at which, as a rule, the best teachers are engaged. As Eliot says: "Schools follow universities and will be what universities make them."¹

II. They give instruction of every kind, from elementary for beginners to education of teachers and training for the highest branches of philological studies.

III. The most reliable and detailed information can be had concerning these first-class institutions, whereas that concerning secondary schools, for instance, is more or less incomplete.

IV. There is no question but that secondary schools, as a rule, will adapt themselves to the conditions laid down in reference to instruction in modern languages in the examinations for matriculation at colleges.

For these reasons, the most explicit statements were required from the most important higher educational institutions, whereas fewer facts sufficed concerning the condition of affairs in all other kinds of schools.

I. COLLEGES AND UNIVERSITIES.

Among the nearly half thousand institutions that go by the name of "college" or "university," there are but a small number which are universities in the German acceptance of the term, or are at least on the road of becoming such. Again, there are others that do so little that in many respects they stand below the level of a German gymnasium. The average college, as it has developed as a specifically American institution, ranks between these two extremes as an institution, the graduates of which, who leave at an average age of 22 years, acquire a highly creditable general education, which is a suitable foundation for the special studies of any learned profession.

The existing highest class institutions have, in connection with their "college," one or more "faculties," which have great similarity to the bodies in connection with German higher institutions of the same name. By their general plan on a large scale; their seminaries, laboratories, museums, and experiment halls; their scientifically educated teachers and the scientific methods followed by them; the preparatory education which they require for their entrance examinations and the knowledge which they demand for the conferring of an academic degree; the number of their students; the means at their command, and the reputation which they enjoy among the highly educated at home and abroad, these "universities" par excellence are so far above the second or third-grade institutions that bear the same title that only those who are thoroughly unacquainted with the conditions are

¹ Charles W. Eliot, *Educational Reform*, page 131.

misled by the term. The so frequent misuse of the term "university" is an evil which should be remedied in the future, and will probably disappear of itself when once the chaotic condition which must prevail from the founding of most of the higher educational institutions by private enterprise or societies of a religious character has been displaced by a uniform regulation of the entire educational system.

It would be out of place here to define the position of all the institutions included in the category of colleges and universities, especially as this attempt would rack the brain of the most experienced educators in the country. Still, one may remark that a glance at the statistics of education will give tangible data to determine the importance of an institution. If, for instance, one finds the statement: The "University of New Mexico," with 10 teachers, 100 students, 5,000 volumes, and an annual income of \$14,000, and Harvard University, with 496 teachers, 4,388 students, 576,900 volumes, and an annual income of \$1,376,672, he need make no further research. Of course there are indisputably first-class institutions suffering from lack of funds, like the Johns Hopkins, which nevertheless have excelled in brilliant accomplishments. Such an exception, however, does not set aside the general rule.

As a matter of course, institutions whose yearly reports show great obligations on the part of teachers and small salaries, whose libraries and other appurtenances are most deficient, whose geographical position leaves no favorable genius loci to be expected, can do nothing of note with regard to German instruction. For the present purpose it will suffice to give an account of how German instruction is organized at a true university, subsequently in the "German sections" of fourteen of the best known and most important universities, and then at a small number of other selected prominent institutions.

For the first end in view the "Columbia" has been chosen, because the author has known this excellent university for a number of years from personal observation and enjoyed the advantage of its regulations, and besides is in possession of a recently given and most instructive lecture on this subject by Mr. William H. Carpenter, professor of Germanic philology and senior professor.¹ German instruction at present is conducted as follows: The introduction of modern languages into the curriculum of the college is the result of a victorious struggle. The old college course did not recognize the modern languages as equal to the classical as a foundation for a liberal education. Latin and Greek were the only languages that were systematically taught. If the opportunity to study a modern language was offered at all, it was only possible as a side branch, perhaps two or three hours a week during a single year. Whoever wanted to learn more was obliged to seek instruction outside of the university, a condition of affairs that has existed in Germany in like manner in order to admit the equal qualification of modern languages.

Unfortunately America possesses no carefully arranged and uniform educational system, such as there is in Germany; in which each part is suited to the other, so as to form a pliable but unbroken chain that binds the whole German realm, east and west, south and north, leading the nation to similar ideas, common thought, and common ideals, as no purely political union can. In America, on the other hand, as is not in the least unnatural in so unequally developed a country, the different parts of the country have very different notions of the nature of the problem, not only of higher but of secondary education. The colleges here have been founded under entirely different conditions, and have always developed on their own lines altogether independent of those of other institutions. The state, as a rule, paid no attention whatever to the matter, so that it is rather astonishing that

¹ German Instruction at American Universities; a lecture delivered before the Gesellig "Wissenschaft licher Verein" of New York, January 13, 1878. With the author's permission, we reproduce the following remarks, partly verbatim, partly condensed.

the whole educational system should have become organized as uniform as is relatively the case. The time will come, however, when the highest educational institutions at least will be so far in accord that liberty of attendance will exist between the different universities, and as characteristic a system of exchange will be adopted as obtains in Germany, where students prefer to attend several universities. In this respect the meeting of the six large universities in the East, February 1, 1896, was an important event, the consequences of which will be known in the course of years in a revolutionizing of the old system of attendance.

The present position of German instruction is as follows: Some smaller colleges adhere to the old régime, according to which the modern languages formed no essential part of the course of study and were learned or not learned by the students, as it pleased them. They also had the privilege of choosing between them and some other study in any one year of the college course. In other colleges there is liberty of choice between German and French in one year or within two years, during which either German or French is a prominent study. In some institutions the opportunity is afforded of learning both languages at the same time or consecutively. Others, again, require that both must be studied in one grade or other of the course. All colleges of this category agree throughout in not requiring any knowledge of modern languages for admission. All that is learned must be acquired in the short space of four years. The actual value of the knowledge of the language thus gained is so problematical that it would be much better to set aside the modern languages altogether and make use of the time given to them in some other way.

Fortunately, what has been said applies only to a minority of small and poorly endowed colleges. In all the large institutions of the country modern languages play an altogether different part and occupy a very prominent position in their curriculums. As a rule, an elementary knowledge of the modern languages is required for admission into the college. Most colleges prescribe that the freshman admitted must pass an examination in German or French. In some instances that will be mentioned farther on candidates must pass examinations in both languages.

After a student has been formally admitted he is sometimes left free to choose whether he will study a modern language, and which one. Sometimes he is obliged to study one or more. In this respect different rules obtain at different colleges; but whether a matter of choice or of obligation, so much has been attained that at the present day ample opportunity is afforded at every American educational institution of the better class to learn French or German thoroughly in nearly every place of development and application; and this is true both of the language itself and its literature. German has acquired not only an honorable but an indispensable position among the branches of study. The time when German was looked upon as unnecessary is long since passed. On the contrary, a certain knowledge of it in the higher grades of education is considered indispensable. No one who is not able at least to read German can receive the highest academic degree of doctor of philosophy at Columbia University, for instance.

Every new student at Columbia is required to know a certain amount of at least one of the two principal modern languages besides English, and both, if he has no knowledge of Greek. Since the conference of February 1, 1896, referred to, these conditions for admission have been in force for the other large colleges in the East. The entrance examination aims to determine whether the candidate possesses sufficient knowledge of German, grammar, and an adequate vocabulary for an academic education, and can translate easy prose.¹ The conditions of admission are thoroughly appropriate. They were defined by a committee composed of an

¹The regulations on the subject were sent to Prof. Seth Low, in full, with the report of the German conference. See pp. 582-3 of this article.

equal number of college professors and members of the teachers' association considered particularly competent for this purpose. Representatives of secondary schools, therefore, had an equal voice with those of colleges. Nevertheless, from all parts teachers are constantly sending forth the cry that too great a burden has been laid upon them and one which they are not able to bear.

In reality every intelligent American schoolboy who knows no German but what he has learned in school during a period of instruction of three hours a week for two years ought to be able to pass this examination. The same result could be attained, in fact, by a thoroughly competent teacher with one hour for a year. The instruction presupposes as an absolute necessity, however, a sufficient practice in grammar, not empiric, but in connection with ample reading matter, by means of which a vocabulary is acquired and the grammatical forms and principles which come under observation in the text are studied, together with daily drill in translation at sight and practice in conversation at least during a part of the hour. To acquire a sufficient vocabulary not fewer than 200 pages of easy prose should be read and studied.

Another question that suggests itself is, whether schools of the present day really prepare pupils so that they are able to pass such an examination? On the whole, they, unfortunately, do not. In 1896 there were at Columbia 41 candidates, of whom only 27 passed; in 1897 there were 71, of whom only 39 passed; in 1898 there were 109, of whom only 64 passed.¹

Consequently something must be wrong, and as it is impossible for a mistake to be in the standard, the organization of secondary schools in general must be held responsible for the evil. These include some institutions whose pupils never fail in the examinations or among whom failure is the exception, whilst pupils of others do so much the worse. The point is a most important one. The accomplishments of colleges are, in a very great measure, dependent upon the material which they receive from secondary schools, and the evil is that many of these have not yet taken up German instruction seriously enough. The chief reason of this is that this language is a recent addition to the curriculum and is more in the nature of an exterior accretion than of an organic element developed under influences acting from within. A further evil is the choice of unfit teachers, who are, moreover, frequently overburdened and poorly paid. School boards, in many cases, think they have done enough by choosing a German by birth for the position in question. That has its incalculable advantages it is true, but it does not supply the deficiency of a professional education.

The fact that a large proportion of students enter from secondary schools with an insufficient knowledge of German has contributed much to lower the dignity of modern languages as elements of the course of study. At Columbia the custom obtains of allowing freshmen to make up the German examination during the first year, but in that case they are required to do a considerable amount of extra work, and are only admitted to the second year course if they have made good their deficiency so as to be able to pass the examination.

In case a student upon entering the college prefers to take the examination in French instead of German, in connection with Greek, he is obliged to study elementary German during the first year. He then receives daily instruction for one hour as has been previously described, and, at the end of the first year must possess as much knowledge of German as those who passed the examination in elementary German upon entering.

¹ Since the recent action of the city high schools has gone into effect the conditions seem to have improved to some extent, for in 1899 there were 96 candidates, of whom 73 passed. However, as a matter of course, the result of a single year is dependent upon accidents, and permits no reliable conclusions, which must be deduced from more full data. In his Educational Reform, Professor Eliot deplores the fact that only 9 of the 230 high schools in Massachusetts regularly prepare competent students for Harvard.

With the admission examination, if German was chosen as the modern language, or with the elementary one year course in German, if candidates preferred to be examined in French, the obligation of students to study German is fulfilled; but an ample number of opportunities are presented to build on this foundation, and it is their own fault if they do not make use of them. For the degree of bachelor of arts, however, no more than an elementary knowledge of German and French is required.

For those students who pass the examination for the higher grade on entering, the opportunity is afforded to follow a higher course at once. To pass the examination for the intermediate course, either an extra year must be devoted to preparatory instruction or the student in question must have a comprehensive knowledge of German before admission. This is much more seldom the case in America than we are led to expect from the large population of German extraction. In New York there are only a few, but still at least some, institutions that are able to prepare for this higher examination.

After the elementary course, two courses with three hours a week for a year are arranged to advance students to the level corresponding to the intermediate course. The one aims to give students, while they are continuing their study of the language, some knowledge of the classical period of German literature. Accordingly, selected passages from Goethe, Schiller, and Lessing are translated. Students are required besides privately to read historical and biographical works on these authors and their times. Compositions written altogether or partly in German, intended to show the results of this study, are required from time to time. A part of every hour is given to sight reading. During the second semester one or more works are read in the original. The language spoken during instruction is as far as possible German.

The other course aims to enable those students who intend to make a special study of history, literature, philosophy, political economy, or other disciplinary study of the kind, to read German books on these subjects with profit. In this case, the work consists chiefly in sight-reading with explanation of the difficult passages. The readers used are, for instance: Freytag's *Bilder aus der deutschen Vergangenheit*, Scherer's *Deutsche Literaturgeschichte*, and Hansen's *Die drei Bevölkerungsstufen*. A special course in this grade is designed for more advanced students of the natural sciences; readers are used containing an appropriate scientific vocabulary, and the selections are from good technical works on these subjects.

After a student has advanced so far he must decide whether he intends to follow the linguistic or the literary course, or both. The first literary course open to him gives him a bird's-eye view of the general development of German literature, by which he is made acquainted with the most important authors and their works, and receives a general idea of the different epochs and the relation of the history of literature to politics, religion, and the development of society.

The course of two hours a week on Goethe's *Faust* (Parts I and II), which claims a whole year, follows upon completion of the general course of the history of literature. In this course the student is made familiar with this work, learns its importance, as well as its poetical and ethical value, and becomes thoroughly acquainted with the history of its origin. Another two hours' course is confined especially to the coryphæi of German literature, and is open to such students as can read German fluently, and desire to study the masterpieces. In this sense such works are read and explained, and students are required from time to time to write compositions on the works studied.

The linguistic course has two divisions in this grade. The one (two hours a week for one year) gives practice in speaking and writing. All is conducted in German discussions and compositions; an excellent opportunity for practical use of the language is thus afforded to those who are sufficiently advanced. The other

course (likewise two hours a week for one year), consists of lectures on the history of the German language, combined with text interpretation of all periods of literature. The purpose is to follow the history of the Modern High German written language gradually; from Old High German to the present time, and to explain the changes of the relations of vowels and the origin of grammatical forms. Suitable readers furnish Old and Middle High German text for the time of Luther, and copies of German literary works for Modern High German.

The *Germanic Seminary*, which likewise works two hours a week, accepts only graduates who are thoroughly familiar with what has been studied in the preceding courses. The critical study of the separate productions of Old and Middle High German poetry is pursued.

The other courses of the curriculum justify the name of the department of the Germanic languages. They include the Scandinavian languages, the Icelandic, and the Gothic. Further lectures are given on philology. All these higher courses naturally are not meant for college students, but for graduates only. This curriculum does not claim to be perfect, and admits of various additions; nevertheless, it has been drawn up with a thoroughness and regularity of plan that are deserving of recognition. If it is carried out systematically from beginning to end, it is possible for even a college student who, on entering, did not understand a single word of German, to become so familiar with the language within the quadrennium that he will be able intelligently to read any printed or written text that presents no unusual difficulties, express himself in correspondence with exactness, and read with a good pronunciation. Furthermore, the opportunity is presented to acquire a comprehensive general knowledge of German literature in all its periods of development, and a special knowledge of the classic writers, modern and ancient. Besides, the German language can be learned in its historic development, together with German and Germanic etymology. In this way the best graduates of every year have acquired an apprehension of the German language very nearly equal to that for their native English.

In case the mental equipment of a student on entering includes a sufficient knowledge of German for him to omit the elementary course, he can attain the aim proposed the more surely, since he is in the position to take all the courses, which are only given alternately in the higher classes, and because, with his greater advancement, he can derive more advantage from instruction and can do more justice to the separate studies.

Columbia could be taken as a type of the better colleges, because its work ranks about equal with that of the University of Chicago, or of the universities of Michigan and Wisconsin. Some universities, like Harvard, have a greater number of courses; others, like Yale, have fewer. On the whole, however, all universities have the same end in view, and the wholesome competition among the greatest institutions of the country fully supplies the want of State supervision exercised in Germany. At all events, German instruction in colleges has been set on a sure foundation, both as regards the forms of instruction and its subjects. The science of pedagogics will not stand still in reference to instruction in the languages, but will make further demands. The issues belong to the future, and will in the course of time be decided in the natural order of normal development.

The following accounts of the "German departments" of 14 leading institutions demonstrate how far each deviates from the type which has been under consideration. As with some the catalogue of 1899-1900, with others that of 1900-1901, was used as main reference, uniformity may in the meantime have become a shade closer. The effort to bring about a general regulation of entrance conditions and of the amount of work to be done for the receiving of academic degrees, is apparent throughout; and the harmonious cooperation of the Modern Language Association has not failed to exert an influence on the uniform organization of German instruction.

HARVARD.

Much has already been said concerning the history of the German department of the leading university of the country; we need, therefore, now only to refer to the state of affairs in that department at the beginning of the year 1901.

The personnel of teachers consists of the following gentlemen: George Alonzo Bartlett, A. M., associate professor of German; Kuno Francke, Ph. D., professor of German literature and chairman of the department of Germanic languages and literatures; Hans Carl Gürthner von Jagemann, Ph. D., professor of Germanic philology and chairman of the division of modern languages; Hugo Karl Schilling, Ph. D., assistant professor of German; Alfred Bull Nichols, A. B., D. B., instructor in German and secretary of the department of Germanic languages and literatures; Heinrich Conrad Bierwirth, Ph. D., instructor in German; William Guild Howard, A. M., instructor in German; John Firman Coar, A. M., instructor in German; Macy Millmore Skinner, Ph. D., instructor in German; Guido Carl Leo Riemer, A. M., instructor in German; William Witherle Lawrence, A. B., instructor in German.

Besides this regular corps of teachers, the following gentlemen conduct separate courses of lectures in this department: George Lyman Kittredge, A. B., professor of English; William Henry Schofield, Ph. D., instructor in English; Dr. Neilson; Dr. F. N. Robinson; Professor Sheldon; Professor Grandgent; Associate Professor Gates.

The courses classed under the head of Germanic languages and literatures are divided into four groups.

I. *German*.—This group comprises those courses which aim to impart a practical knowledge of the German language, and to introduce the student to the principal works of the great German writers.

II. *German literature*.—This group is devoted to the history of German literature and to a critical study of special phases of German culture.

III. *Scandinavian literature*.—This group consists of courses which aim to impart a practical knowledge of the Dano-Norwegian language; to introduce the student to the best works of modern Danish and Norwegian writers, and to aid him in a critical study of the great monuments of the old Norse literature.

IV. *Germanic philology*.—This group is devoted to a comparative study of Germanic languages and institutions and to instruction in the methods of linguistic and literary research.

SEPARATE COURSES.

I. PRIMARILY FOR UNDERGRADUATES.

1. Elementary course—Grammar—Translation from German into English, and elementary exercises in translating into German. Three times a week.

The principal aim of course 1 is to give the student a knowledge of German sufficient to enable him to read easy German at sight and translate simple English sentences into German. Special attention is paid to systematic training in pronunciation. Five teachers (for freshmen in Harvard College).

2. Elementary course—Grammar—Translations from German into English, and elementary exercises in translating into German. Three times a week. Three teachers (for students of the Lawrence Scientific School who did not present German at the examination for admission).

3. Elementary course—Grammar—Composition—Translation and reading at sight—Selections in prose and poetry. Five times a week, counting as two courses.

Course 3 is intended for those students who, beginning German in their freshman year, wish to give more time to this language than is prescribed in course 1. It will be found especially adapted to those students who intend, in subsequent years, to give much attention to college studies in which a good knowledge of German is of advantage. Such studies are ancient and modern languages, philosophy, history, fine arts, etc.

4. German prose and poetry—Reading at sight—Grammar and composition. Three times a week.

The course is conducted in a manner to meet the needs of students who can read easy German at sight, but who have not had as much systematic training in grammar and composition as is given in course 1. Practice is given in reading at

sight, in pronunciation, in translation from German into English and from English into German, and in writing German from dictation.

5. German prose and poetry—Reading at sight—Grammar and composition. Three times a week.

This is the course best adapted to the needs of the students who intend in a subsequent year to take any of the higher courses in German. Constant practice is given in reading at sight, in pronunciation, and in translation from German into English and from English into German. No attempt is made to teach the student to speak German, but practice in writing German from dictation and similar exercises aid to give him some facility in understanding German when it is spoken or read by others. This is a necessary part of the preparation for courses 12, 13, and 14, which are conducted in German.

6. German prose—Subjects in history and biography—Reading at sight. Three times a week.

This course is especially designed for those students who wish to acquire a sufficient knowledge of the language to enable them to read German books on history, philosophy, etc. It may, however, if taken in connection with course 8, serve as an introduction to courses 11, 12, 13, and 14. A large amount is read, and much time is given to reading at sight. The matter to be read is selected from such works as Riehl's *Kulturgeschichtliche Novellen*, Von Sybel's *Kleine historische Schriften*, Freytag's *Bilder aus der deutschen Vergangenheit*, etc. The examinations test the student's knowledge of the subject as well as of the language of the texts.

7. German prose—Subjects in natural science—Reading at sight. Three times a week.

This course is intended to furnish drill in the reading of modern scientific German, and is recommended to students who are taking, or who plan to take, special courses in natural science or in medicine. An elementary knowledge of at least two of the natural sciences is requisite for success in this course. Dippold's *Scientific German Reader* is used as an introduction, and is followed by monographs on various subjects, in order to give the student as large a vocabulary as possible. The reading matter is taken from such books as Hirzel's *Chemie*, Brewer's *Naturlehre*, Müller's *Die elektrischen Maschinen*, Helmholtz's *Ueber Goethe's naturwissenschaftliche Arbeiten*.

8-10. German grammar and practice in writing German. Twice a week.

In courses 8-10 instruction is given in the principles of German grammar and weekly themes in German are required. They are graded courses, and no two of them may be taken in the same year.

11. Introduction to German literature of the eighteenth century—Selections from the works of Lessing, Goethe, and Schiller—German ballads and lyrics—Translation—Reading at sight—Composition. Three times a week.

The object of this course is to give an introduction to the study of German literature. The texts used include selections from the prose writings of Goethe and Schiller and selected dramas of Lessing, Goethe, and Schiller. Kluge's *Auswahl deutscher Gedichte* is used as a text-book in the study of German ballads and lyrics. Much attention is given to translation at sight, and there are frequent exercises in composition and in writing German from dictation.

12. The German drama of the classic period—Lessing: *Minna von Barnhelm*; Emilia Galotti; Nathan der Weise—Schiller: *Maria Stuart*; *Die Jungfrau von Orleans*; *Wallenstein's Tod*—Goethe: *Egmont*; *Faust*—Lectures in German. Three times a week.

The object of this course is to make the student acquainted with the principal dramas of Lessing, Goethe, and Schiller. The history of German literature of the classic period forms the subject of weekly lectures, special attention being paid to the drama.

13. Schiller and his contemporaries—Schiller, *Kabale und Liebe*; *Wallenstein*; *Maria Stuart*; *Die Jungfrau von Orleans*; *Die Braut von Messina*—Goethe, *Egmont*; *Faust*—Lessing, *Emilia Galotti*—Ballads and lyrics. Lectures in German. Three times a week.

This course aims to give the student a general idea of the classic period of German literature, and a more detailed acquaintance with the life and the principal works of Schiller. The development of German literature from Lessing's first appearance to Goethe's death is treated in weekly lectures. Much time is devoted to practice in reading at sight and to the oral discussion and criticism of the texts.

14. Goethe and his time—Lessing, *Emilia Galotti*—Schiller, *Wallenstein*—Goethe, *Goetz von Berlichingen*; *Egmont*; *Iphigenie*; *Tasso*; *Dichtung und Wahrheit*; *Gedichte*; *Faust*—Lectures in German. Three times a week.

In this course the principal works of Goethe and selected works of Lessing and

Schiller are read and discussed. Goethe's life and his position in the literary movements of his time form the subject of weekly lectures.

II. GERMAN LITERATURE.

Courses 16, 19, 20, 21, 22, 23, 24 are conducted in German.

15. Introduction to the history of German literature—Lectures and collateral reading of representative works in English translations. Once a week.

This course does not require a knowledge of German. It is intended chiefly for students who, without making a specialty of the study of German literature, wish to obtain a general knowledge of its great men and its leading ideas. Francke's *Social Forces in German Literature* is used as text-book, the lectures in the course being intended as a running commentary and supplement to it. The collateral reading consists of the standard works of German literature from the Nibelungenlied to Goethe's *Faust*, in English translations.

16. History of German literature to the nineteenth century, with special study of the classic periods of the twelfth and eighteenth centuries—Lectures, reading, and English theses. Three times a week.

This course is intended to give a more detailed knowledge of the development of German literature and a better understanding of its great men than can be obtained in Course 25. Among other works, the following are read and discussed: The *Nibelungenlied* (translated into modern German by Roman Woerner); *Gottfried von Strassburg's Tristan* (translated into modern German by Wilhelm Hertz); *Walther von der Vogelweide's Gedichte* (translated into modern German by Bruno Obermann); *Lessing's Laocoon and Nathan*; *Schiller's Wallenstein and Braut von Messina*; *Goethe's Wilhelm Meister and Faust* (both parts). The student is also expected to consult the standard works on the history of German literature, such as *Scherer's Geschichte der deutschen Litteratur*, *Hettner's Geschichte der deutschen Litteratur im 18. Jahrhundert*, etc., and critical commentaries by such men as *Kuno Fischer*, *Herman Grimm*, *Erich Schmidt*, *Ludwig Bellermann*, and others.

17. German literature in the first half of the nineteenth century—*Kleist—Uhland—Heine*—Lectures with collateral reading. Three times a week.

In this course the reading and discussion of selected works is accompanied by a weekly lecture, and by assigned outside reading. The lectures deal with the romantic school; *Heinrich von Kleist*; romantic fiction; *Uhland* and the *Swabian school*; romantic lyric; the poetry of pessimism; *Young Germany*; *Heinrich Heine*. The course is conducted in English.

18. German literature in the second half of the nineteenth century—The development of the novel and the drama—Lectures with collateral reading. Three times a week.

This course is conducted on the same lines as the preceding one. The lectures deal more particularly with the development of the German novel, and with the drama since 1840, but other aspects of the period are not neglected. The class-room reading is in the drama (*Hebbel*, *Otto Ludwig*, *Wildenbruch*, *Sudermann*, *Gerhart Hauptmann*) and the lyric (*Geibel*); the outside reading is taken wholly from modern prose fiction. The course is conducted in English.

19. German literature in the twelfth and thirteenth centuries—*Nibelungenlied—Kudrun—Hartmann. Der arme Heinrich—Wolfram, Parzival—Walther von der Vogelweide*—Translation into modern German—Lectures and collateral reading. Three times a week.

This course is intended to give the student a reading knowledge of Middle High German, and to acquaint him with some of the representative works of mediæval German literature. Incidentally, exercises in translating from the original into the modern idiom afford practice in speaking German; but members of the class who prefer to translate into English are at liberty to do so. The reading of the texts is supplemented by weekly lectures, in German, on the development of German literature in the twelfth and thirteenth centuries.

20. German literature and art in the thirteenth and fourteenth centuries—The mystic movement—*Meister Eckhart; Suso; Tauler*—First climax of religious sculpture—*The Marienlegenden*. Twice a week.

The lectures in this course deal with the growth of individual thought and feeling in religious speculation, art, and poetry, which marks the thirteenth and fourteenth centuries as the transition period from mediæval to modern culture. The collateral reading consists of selected portions of the mystic literature and of the legendary and didactic poetry of the fourteenth century.

21. German literature and art in the fifteenth century—The religious drama

and its relation to religious painting and sculpture from the Van Eycks to Dürer and Vischer. Twice a week.

The lectures in this course deal with the principal cycles of the Christian legend and their treatment in the religious drama, painting, and sculpture of the fifteenth century. The collateral reading consists of selected Christmas, Easter, and passion plays.

22. German literature from the Reformation to the classic period of the eighteenth century—Lectures, reading, and theses. Once a week.

The principal topics of the lectures are: Influence of the Reformation upon German literature; the beginning of a reactionary movement; the Thirty Years' War; preponderating influence of foreign culture; sporadic attempts to preserve the national character of the language and literature—The Sprachgesellschaften. First Silesian, Königsberg, and second Silesian schools—Development of the novel—Eighteenth century—Slow growth of national consciousness; opponents of the Silesian schools; gradual emancipation of literature from foreign influence—Haller and Hagedorn; Gottsched, Bodmer, and Breitinger; Klopstock, Lessing, and Wieland.

The most important works of this period are read and discussed.

23. The early romantic movement in Germany; with special reference to its social and political aspects—Novalis—The brothers Schlegel—Tieck. Twice a week.

The lectures in this course trace the history of romanticism and its relation to German public life from the last decade of the eighteenth century to the national breakdown in the Napoleonic wars. Every member of the course is expected to make a special study of some one author of the period.

24. The later romantic movement in Germany, with special reference to its social and political aspects—Arnim—Brentano—Fichte. The literature of the wars of Liberation and of the Restoration. Twice a week.

The lectures in this course trace the history of romanticism and its relation to German public life from the national regeneration following the catastrophe of Jena, through the wars of liberation, and the restoration epoch, to the beginning of young Germany. Every member of the course is expected to make a special study of some one author of the period.

III. SCANDINAVIAN LITERATURE.

FOR UNDERGRADUATES AND GRADUATES.

25. Modern Danish and Norwegian literature—Holberg—Oehlenschläger—Ibsen—Björnson and others—Practice in the spoken language—Lectures on the history of Scandinavian literature. Three times a week.

This course is devoted chiefly to the reading and discussion of important works of leading Danish and Norwegian authors of modern times. No previous knowledge of Scandinavian is necessary. Groth's *Dano-Norwegian grammar* will be used. Johann Storm's *Dialogues français* (Norwegian-French) is recommended.

PRIMARILY FOR GRADUATES.

26. Icelandic (Old Norse)—Selections from the Sagas and the Elder Edda. Three times a week.

The object of this course in the first half year is to give a reading knowledge of ordinary saga prose; in the second half year a considerable portion of the Poetic Edda is read. Noreen's *Altisländische und altnorwegische Grammatik*; Holthausen's *Lehrbuch der altisländischen Sprache*, Vol. I (*Elementarbuch*), and Vol. II (*Lesebuch*); Mogk's *Gunnlaugssaga Ormstungu*; Wilken's *Prosaische Edda*; and Hildebrand's *Ältere Edda*, are used as text-books.

IV. GERMANIC PHILOLOGY.

PRIMARILY FOR GRADUATES.

The following courses are intended for students who wish to devote themselves to the philological study of the Germanic languages and literatures: Courses 27 (Gothic), 29 (Old Saxon), 33 (Germanic mythology), and 34 (Germanic antiquities), are of a more general character and will be found equally valuable to students of English and of German. Course 30 (Old High German), 31 (Middle Low

German), 35 and 36 (the seminary courses), and 32 (history of the German language) are especially designed for students of German.

27. Gothic—Introduction to the study of Germanic philology—General introduction and phonology. Three times a week.

This course should be taken first by all students of Germanic philology, since the records of the Gothic language that have been preserved are older than those of the other Germanic dialects and represent in many respects the most archaic forms of Germanic speech accessible to us. Braune's *Gotische Grammatik* and Heyne's *Ulfilas* are used as text-books.

28. Introduction to the study of Germanic philology, continued—Morphology—Etymology. Three times a week.

29. Old Saxon—Introduction to Germanic metrics. Three times a week.

This course is devoted to the study of Old Low German, or Old Saxon, and its relations to Old High German on the one hand and Anglo-Saxon on the other. Gallée's *Altsächsische Grammatik*, Sievers's *Heliand*, Heyne's *Kleinere altniederdeutsche Denkmäler*, and Zangemeister-Braune's *Bruchstücke der altsächsischen Bibeldichtung* are used as text-books.

30. Old High German. Half course (first half year). Three times a week.

In 1899-1900; to be given in 1900-1901.

Braune's *Althochdeutsche Grammatik* and the same author's *Althochdeutsches Lesebuch* are used as text-books.

31. Middle Low German. Half course (second half year). Three times a week.

This course is devoted to the study of Middle Low German and Middle Netherlandish. Lectures are given on the literature of those dialects, and especially on the *Tiersage*, Lübben's *Mittelniederdeutsche Grammatik nebst Chrestomathie* and Martin's *Reinaert* are used as text-books.

32. History of the German language. Three times a week.

The object of this course is to give a systematic presentation of the development of the German language from the time of the earliest records to the present, with special reference to the historical explanation of living forms. Acquaintance with Gothic, Old Saxon, Old High German, and Middle High German is presumed.

33. Germanic mythology. Half course (first half year). Three times a week.

34. Germanic antiquities. Half course (second half year). Three times a week.

In this course Germanic life is treated in its various aspects from the origins down to the later Middle Ages. The course is chiefly designed to furnish a commentary on the most important allusions to public and private life in the principal works of the Anglo-Saxon, Old Saxon, Old and Middle High German, and Icelandic literatures.

SEMINARY COURSES.

The seminary courses have two purposes in view: First, to make a thorough study of selected works with special reference to text criticism and (in courses 35 and 36) to etymology and the history of grammatical forms; second, to acquaint the student with the methods of linguistic and literary research through original investigations carried on by him under the direction and supervision of the instructor. The exercises take place once a week and generally last an hour and a half. Occasionally the results of the work done by the students are presented by them before the Modern Language Conference.

35. The works of Hartmann von Aue.

36. Selected topics in the German romantic movement.

TEACHERS' COURSE.

PRIMARILY FOR GRADUATES.

37. The methods and equipment of a teacher of German in secondary schools. Lectures, discussions, required reading, and illustrations of class work. Three times a week.

Among the subjects treated in the lectures and discussions are the following: The adaptation of methods to the age and previous training of students; the arrangements of courses in different schools; the choice of text-books; the annotation of texts; the teachers' sources of information; the disciplinary and practical value of the study of German and its relation to the study of English. Students

taking the course are required to prepare reports on grammars, readers, or editions of texts, and present to the class some of the more difficult topics in grammar, syntax, and composition.

ADDITIONAL COURSES.

The attention of students of Germanic languages and literatures is also called to the following courses:

ENGLISH.

Anglo-Saxon—Bright, Anglo-Saxon reader. Half course (first half year). Three times a week.

Anglo-Saxon—Béowulf. Half course (second half year). Three times a week.

Historical English grammar. Half course (second half year). Three times a week.

Anglo-Saxon—Cædmon—Cynewulf. Half course (second half year).

English literature in its relation to German literature, from 1790 to 1830.

ROMANCE PHILOLOGY.

General introduction to linguistic science—Phonetics—Lectures on the principles of change in language. The pronunciation of English, French, German, and Latin. Twice a week.

Old French—Phonology and inflections—The oldest texts—La Chanson de Roland—Chrétien de Troyes—Aucassin et Nicolette. Three times a week.

Provençal—Language and literature, with selections from the poetry of the Troubadours. Three hours a week.

COMPARATIVE LITERATURE.

The origin and development of historical epic poetry in mediæval Europe. Half course (first half year). Three hours a week.

The origin and literary history of the Arthurian legends and romances—Lectures, special investigations, and theses. Three hours a week.

English literature in its relation to German literature, from 1790 to 1830.

REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY.

For the degree of doctor of philosophy not less than two years, at least one of which must be spent in residence at this university, devoted to advanced studies, are required of students already qualified for candidacy for the degree. The faculty will, in estimating the amount of a candidate's study for the degree, give weight to advanced work done in the graduate department of another university.

The period of residence and study named above must be regarded merely as a minimum requirement. The requirement of time is wholly secondary.

The degree is given, not for the mere reason of faithful study for a prescribed time, or in fulfillment of a determinate programme, and never for miscellaneous studies, but on the ground of long study and high attainment in a special branch of learning, manifested not only by examinations, but by a thesis, which must be presented and accepted before the candidate is admitted to examination, and must show an original treatment of a fitting subject, or give evidence of independent research.

The special requirements for the degree of doctor of philosophy in Germanic philology will necessarily vary according to the special line of work chosen by the candidate. In a general way, however, it may be said that, apart from the thesis, which may treat either a linguistic or a literary subject, the following attainments will be expected from a candidate whose main subject is German:

1. A knowledge of the history of German literature and its relation to the political, philosophical, and artistic movements of German national life.

2. A knowledge of the history of the German language and its general relations to the early Germanic dialects, including a reading knowledge of Gothic, Old High German, Middle High German, and two of the following: Old Saxon, Anglo-Saxon, or Old Norse.

3. A detailed knowledge of some special field within the range of subjects indicated under 1 and 2.

4. A practical command of modern German.

In the case of a candidate who offers as his main subject some other Germanic language, e. g., Dano-Norwegian or Dutch, these requirements will be modified accordingly.

DEPARTMENTAL LIBRARY.

In addition to a large collection of German books in the college library, the department has a reading room in the Warren Building with a special library of about 500 volumes and a number of German periodicals. The same building contains the French and Romance libraries and the Child Memorial Library, a collection of books on English literature and philology, which are also accessible to students of German.

DEUTSCHER VEREIN.

The Deutscher Verein, a student organization composed of graduates and undergraduates, holds meetings of a social character, at which topics relating to German life and literature are discussed.

MODERN LANGUAGE CONFERENCE.

The Modern Language Conference is composed of instructors and advanced students of modern languages and literatures. Its object is the promotion of independent research and of closer intercourse between instructors and students. The conference meets at regular intervals (usually every other week) throughout the college year for the presentation and discussion of papers of general interest.

The number of students that participate in the different courses of the German department amounts to 1,200, so that the best opportunities for instructing in German are afforded. The university library, the "Schier endowment," and the efforts to combine a "German museum" with the university are referred to in the third part of this work. At the beginning of the year 1901 the funds collected for the "museum" amounted to about \$5,000. After the board of trustees advises the application of \$15,000 for the museum out of the recent legacy of \$50,000 from Henry Willard to the university the idea can be realized, as \$20,000 will suffice for the commencement.

COLUMBIA.

A competent German judge, who published his impressions of American universities in 1896, says of Columbia University of New York, into which King's College, founded in 1754, developed after the Revolution, that "if it continues to progress in the same proportion as during recent years, it will outrival Yale and Harvard."¹

An impartial observer can not fail to recognize the progress that has been made since those words were written. It is manifested exteriorly in the magnificent buildings in the metropolis where the university has been established for three years, as in the largely increased number of teachers and students. Last year, according to the Columbia University Quarterly, the former numbered 389, the latter 3,888; consequently Harvard, with 448 teachers and 5,340 students, is the only one in advance. However, as in the meantime Columbia University has united with the "Teachers' College," the entire number of college students, graduate students, auditors, students of Barnard College for women, and the Teachers' College, does not fall far below the large figures of Harvard.

¹ Zimmermann, Universities in the United States of America, p. 83.

The following statement¹ gives an interesting view of the hopeful development of this institution since 1893:

Officers and students of Columbia University.

Students primarily registered in—	1896.	1897.	1898.	1899.	1900.	Year's gain.
Columbia College.....	300	312	387	446	464	18
Freshmen.....	99	102	129	106	124	18
Sophomores.....	61	85	89	113	95	-18
Juniors.....	49	55	86	89	99	10
Seniors.....	51	48	55	93	88	-5
Specials.....	40	22	28	45	53	13
Barnard College ²	154	177	202	223	292	69
Freshmen.....	21	38	43	54	82	28
Sophomores.....	21	29	36	38	51	13
Juniors.....	22	23	23	39	39	0
Seniors.....	21	22	24	39	52	13
Specials.....	69	65	76	53	68	15
Total undergraduates.....	454	489	589	669	756	87
Faculty of political science.....	59	64	85	118	109	-9
Faculty of philosophy.....	82	112	120	108	180	72
Faculty of pure science.....	36	44	57	53	64	11
Barnard college ²	49	61	76	71	(³)	(³)
Total nonprofessional graduate students ⁴	226	280	338	350	353	3
Schools of applied science.....	355	404	431	464	546	82
First year.....	105	123	128	130	153	23
Second year.....	88	106	106	114	132	18
Third year.....	80	74	86	111	123	12
Fourth year.....	63	80	75	69	99	20
Graduates ⁴	3	8	7	3	6	3
Specials.....	16	13	29	37	33	4
Law school.....	340	368	342	377	427	50
First year.....	171	135	132	166	172	6
Second year.....	100	139	103	111	151	40
Third year.....	65	92	106	99	100	1
Specials.....	4	2	1	1	4	3
Medical school.....	624	729	697	757	751	-6
First year.....	276	222	197	226	245	19
Second year.....	158	190	162	159	190	31
Third year.....	132	151	178	158	148	-10
Fourth year.....	0	143	140	173	147	-26
Specials.....	22	23	20	41	21	-20
Unclassified.....	16	0	0	0	0	0
Teachers' College.....	.....	.....	106	317	448	131
First year.....	.....	.....	18	42	24	-18
Second year.....	.....	.....	20	19	30	11
Third year.....	.....	.....	46	80	93	13
Fourth year.....	.....	.....	29	46	76	30
Graduates ⁴.....	.....	.....	51	92	⁵ 127	25
Specials.....	.....	.....	32	38	40	2
Auditors and unclassified students.....	.....	.....	.....	.....	58	58
Total professional students.....	1,319	1,501	1,666	1,915	2,172	257
Auditors.....	.....	.....	15	22	20	-2
Students at summer session.....	.....	.....	.....	.....	417	417
Extension students, Teachers' College ⁶.....	.....	.....	470	750	721	-29
Total registration.....	.....	.....	.....	.....	4,439	733
Double registration.....	.....	.....	.....	.....	⁷ 178	178
Grand total of students.....	1,999	2,260	3,078	3,706	4,261	555
Officers.....	.....	.....	426	443	471	28
Total university influence ⁸.....	.....	.....	3,504	4,149	4,732	583

¹ From the Columbia University Quarterly, December, 1900.

² Barnard figures are those for the end of the academic year, except for 1899 and 1900.

³ From October, 1900, women graduates register under the university faculties.

⁴ From some points of view this total should include 79 other graduate students in the schools of applied science and in Teachers' College.

⁵ Includes 54 graduates primarily registered under the university faculties.

⁶ Extension students are held to full requirements of regular courses in Teachers' College.

⁷ Of students registered also in other departments summer session has 74; Teachers' College, 104.

⁸ Including 608 pupils in Horace Mann school and 63 in experimental school.

The history of the German department furnishes the explanation of the immense stride which Columbia University took under the presidency of Hon. Seth Low. This history actually dates back to the time when the new university appeared as the successor of the suspended King's College. In the autumn of 1784 John Daniel Gross first instructed in German, and continued till the year 1795. Again in 1830 and 1831 an effort was made to introduce German instruction. Professors Frederick Shaeffer and William Ernenputsch made the attempt, but each resigned at the end of the term. At last a German, Frederick Gebhard, hit upon the fundamental procedure for procuring justice for his native language. He put his hand in his own well-filled purse, drew out \$20,000, and commissioned the trustees of the university to make use of the interest on that capital to pay a professor of the German language and literature, and under no circumstances to apply the money to any other purpose. The "Gebhard professorship" was filled April 3, 1843, and the German faculty at Columbia dates from that day.

Until the year 1847 German was an obligatory study; since then it has been optional.¹

The chair of German was at that time filled by John Louis Tellkampff; his successor, Henry I. Schmidt, continued in office till 1880. Charles Sprague Smith was next called; in 1881 an assistant was given to him, Hjalmar Hjörth Boyesen. After the Gebhard professorship was given to the last mentioned in 1882 the appointment of more teachers became absolutely necessary. The department in 1900 consisted of the following personnel: William H. Carpenter, Ph. D. (Freiburg), professor of Germanic philology; Calvin Thomas, A. M. (Michigan), Gebhard professor of the German language; William A. Hervey, A. M. (Columbia), instructor in the German language and literature; Rudolf Tombo, jr., Ph. D. (Columbia), tutor in the German language and literature; Arthur F. J. Remy, A. M. (Columbia), tutor in the German language and literature; Emil A. C. Keppler, A. M. (Columbia), assistant in the German language and literature.

The following gentlemen are delegated for Barnard College: Rudolf Tombo, sr., Ph. D. (Rostock), tutor in the German language and literature; William Alfred Braun, A. B. (Columbia), assistant in the German language and literature.

The personnel of teachers has doubled in the last three years, while the number of pupils has increased during the same time from 150 to 400 for the scholastic year of 1900-1901.

The German department forms a section of the faculty of philosophy, which Pres. Seth Low arranged according to the German model and the action taken by the Johns Hopkins University in 1890. This new faculty embraces the classic, oriental, and modern languages, as well as comparative philology. Included among the strictly philosophic studies there is also a chair of pedagogics, which has been most ably filled by Prof. Nicholas Murray Butler.

President Low's ideas may be understood from his speech delivered in Baltimore² the 23d of February, 1895, on the nineteenth anniversary of the Johns Hopkins University. He pertinently remarks that a university in the American sense is something different from what is thereby understood in Europe, and that in this country it signifies a relatively new institution. However, the highest educational institutions of America should have the same aim as the German universities (Hochschulen), which are "so powerful an instrument for the service of humanity." He adds, in the following words:

The aim which the German university has set before itself, and which it has very largely realized under the conditions natural to German life, is the aim, in my judgment, which the American university has set before itself and which it has very largely realized under the conditions natural to American life, because,

¹ Carpenter, "The Germanic languages and literatures at Columbia University." The Columbia University Bulletin, March, 1897, pp. 82, 83.

² Johns Hopkins Studies in Historical and Political Science, Baltimore, 1898, p. 5029.

after all has been said, the world is ruled by its thinkers, and civilization is carried forward by the patient investigators of natural laws; the lives of men are largely shaped by the teachings of experience as revealed by historical study, and the literature of men is enriched by every addition to our knowledge of literature and language of the past. Nature's craftsmen in all these directions will produce results according to their gifts outside of a university, if they get no opportunity within it. But the history of Germany clearly shows that the opportunity to serve mankind along such lines is much enlarged, if to train such men is the chosen aim of the university; in part, because in that case the university affords the material apparatus by the aid of which the natural thinker or investigator can best do his work, and most of all, because in a university so constituted the atmosphere of the place and the spirit of the men who work there are friendly to such labors.

The observations of the author confirm particularly the truth of the closing remarks with regard to the influence of the German department, which has so favorably developed in late years, although the number of German-American students is very small. It is rather the Anglo-American element which, with comparatively modest assistance on the part of the German, is doing the noteworthy work of culture accomplished, and is thus opening so hopeful a future to American civilization.

As the plan of study has already received explicit mention, we need only add the list of courses held at Columbia University during the year 1900-1901.

GERMAN.

Course A. Elementary course in three sections. Three times a week.

Course 1. Longer elementary course. Six hours.

Course 2. Grammar, reading, and composition. Three sections, each three times a week.

Course 3. Selected works of Goethe, Schiller, and Lessing. Texts, chiefly dramatics and essays. Three times a week.

Course 4. Historical prose. Three times a week.

Course 5. Scientific German. Three times a week.

Course 6. History of German literature from the earliest times to the nineteenth century. Twice a week.

Course 7. Goethe's Faust, first and second part. Lectures and recitations. Two hours a week.

Course 8. Practice in speaking and writing German. Talks, conferences, and themes, all in German, upon linguistic and literary topics. Two hours a week.

Course 9. History of the German language. Two hours a week.

Course 10. Great German writers (Schiller and Heine). Two hours a week.

Course 11. Old High German. Lectures and texts. Two hours a week.

Course 19. Teacher's course. Lectures upon methods of teaching and cognate topics. Two hours a week.

Course 20. Geschichte der deutschen Litteratur im 19. Jahrhundert. Vorlesungen in deutscher Sprache. Two hours a week.

SCANDINAVIAN.

Course 12. Swedish: Elementary course in the language, with miscellaneous reading and a general survey in lectures of the history of Swedish literature. Two hours a week.

Course 13. Danish: Elementary course in the language, with miscellaneous reading and a general survey in lectures of the history of Danish literature. Two hours a week.

Course 14. Icelandic: Elementary course. Two hours a week.

Course 15. Icelandic: Advanced course. The Völsunga Saga, lectures and texts. Two hours a week.

DUTCH.

Course 16. Dutch: Elementary course in the language with miscellaneous reading, and a general survey in lectures of the history of Dutch literature. Twice a week.

GOthic.

Course 17. Gothic. Two hours a week.

GERMANIC PHILOLOGY.

Course 18. General introduction to Germanic philology. Lectures and exercises. Twice a week.

GERMANIC SEMINAR.

Course 21. Germanic seminar. Critical study of the Middle Low German, Reinke de Vos (first half year), and Young Germany (second half year).

A comparison between these courses and those of Harvard shows that German literature receives less attention, and that the Swedish, Danish, and Dutch languages are taught, whereas they are not taught at Harvard. An equalization is partly brought about by the public German lectures, which, according to the action taken by the Johns Hopkins, have been held for five years, and treat of the history of German literature and other subjects of general interest.

In 1896 and 1897 Prof. Louis von Eltz spoke on Streets in the Middle Ages and Germany after the Thirty Years' war; Professor Seibert on Johanna Ambrosius; Professor Thomas on Schiller; J. Winter on Heinrich Heine, and the author of this article on Fridtjof Nansen and his polar expeditions. In the year 1898 these lectures, heretofore separate and distinct, were extended in the form of a series, and were held in the large Schermerhorn Hall. In March, 1898, Dr. Joseph Senner spoke on The immigration question in America; Rev. Dr. Gustav Gottheil on Schiller's Lay of the Bell; Prof. Is. Keller on The modern German drama; Director Heinrich Conried on The stage; Louis von Eltz on Two Austrian poets, Franz Grillparzer and Anastasius Grün.

The lecturers and their subjects in 1899 were as follows: Rev. Dr. Gustav Gottheil, Goethe's Epilogue to Schiller's Bell; Dr. Julius F. von Vesteneck, Life in the Alps; Dr. Rudolf Tombo, German etymology; Rev. Dr. August Ulmann, The development of religious thought and life in Germany; Mr. Henry E. Krehbiel, The National song in America; Mr. Louis Viereck, A trip to Alaska; Mr. Heinrich Conried (manager of the Irving Place Theater), The art of speaking; Dr. Rudolf Tombo, Walther von der Vogelweide.

The lecturers and their subjects in 1900 were as follows: Rev. Dr. Gustav Gottheil, At the commencement of the century; Mr. Charles A. Bratter (foreign editor of the *Staats-Zeitung*), Sins of speech of German-Americans; Prof. Franz Boas, Myths of peoples living in a state of nature; Dr. Julius Sachs, The intellectual life of German universities in the sixties; Mr. George von Skal (managing editor of the *Staats-Zeitung*), Rights, difficulties, and accomplishments of the German-American press; Rev. Dr. August Ulmann, The passion play at Oberammergau, illustrated; Mr. Rudolf Cronau, Two and one-half centuries of German life in America; Mr. Louis Viereck (late member of the German Reichstag), Recollections of the German Reichstag; Mr. Sadakichi Hartmann, The Japanese theater; Emil A. C. Keppler, A. M., Bürger, a German forerunner of William Wordsworth.

The lectures held from January 24 till March 28, 1901, were as follows: Rev. Gustav Gottheil, Ph. D., rabbi of Temple Emanu-El, Poetry in the prose of life; Hans M. von Kadich, Ph. D., The zoological question of North America; Mr. Udo Brachvogel, Joseph Victor von Scheffel's Lady Aventure; Mr. Charles A. Bratter, foreign editor of the *Staats-Zeitung*, The editor the author's stepbrother; Ernst Richard, Ph. D., German student life; Mr. Heinrich Conried, director of the Irving Place Theater, The modern German drama; Max F. Blau, Ph. D., Adelphi College, Heinrich von Kleist; Rev. August Ulmann, S. T. D., rector of Trinity School, Lessing and his times; Louis Viereck, late member of the German Reichstag, Recollections of Germany's great time, 1870-71, illustrated; Mr. George von Skal, editor of the *Staats-Zeitung*, Education and intelligence.

The Deutscher Verein, the university library, the endowments for German purposes, and German stage representations of the classics for students are spoken of in the third part of the book.

YALE.

Yale University, founded in 1701, enjoys the reputation of being par excellence the school of scholars, in contrast to Harvard, whose students play so important a part in the national and political life of the country. While Harvard University is no further from the center of Boston than the Columbia from the City Hall in New York, Yale is situated in a relatively small city of Connecticut—New Haven—which, at the beginning of the nineteenth century, possessed only 5,000 inhabitants, though it has increased to over 100,000 during the last one hundred years. Conditions, therefore, seem in many respects to have been at Yale more favorable to closer application to abstract studies, while the proximity of the large city of Boston favored broader points of view at Harvard.

Under President Theodore D. Woolsey (1846-71), who was educated in Germany, Yale received its art school and its Sheffield Scientific School. Under President Timothy Dwight, who likewise studied in Germany and placed a high value on German universities, the elective system was adopted in 1886. The fact that the present president, A. T. Hadley, was formerly professor of German at the university promises well for the German department, the development of which is similar to that of Harvard. After the Franco-German war German ceased to be treated as a stepchild; for three sessions it was an obligatory study. The same is the case at the Sheffield Scientific School, where a candidate for a bachelor's degree must pass an examination in German or French.

The personnel of teachers is large and consists of the following gentlemen, besides the head professor, Arthur H. Palmer: Prof. Gustav Gruener; the professors extraordinary, R. N. Corwin and Hans Oertel; and the instructors, Dr. Adams, Farr, Eldridge, Dr. Carrington, and Luquiens. These instruct at both institutions in language and literature.

In 1900 the number of students who pursued the course in German were about 450 from Yale, 400 from the Sheffield school, and 7 graduates for the purpose of promotion; in all about 850 students out of a total of 2,540, consequently a very fair proportion.

Upon his induction into office during the winter session of 1899-1900, President Hadley remarked, in his inaugural address, that athletic exercises should not force scientific study into the background. This opinion harmonizes with the German idea. It is to be hoped that he will enlarge the German library, which contains only 8,000 to 10,000 volumes, not including the 500 volumes of the seminary library. The Scandinavian library of Count Riant is supposed to be the best in America.

The scope of this essay unfortunately does not permit a complete history of the German department or a detailed account of the course of study, based upon the "Notes on the development of instruction in the modern languages at Yale," including information on the subject respecting Princeton, kindly furnished to us by Professor Gruener.¹

It were wrong to fail to mention a most prominent student that Yale has given to the world, Andrew D. White, and his magnificent address delivered June 26, 1883, to his classmates on the thirtieth anniversary of his graduation, especially as his words seem to have been somewhat forgotten in the lapse of seven years. The following is from this memorable speech, which he entitled "The message of the nineteenth century to the twentieth:"

The great thing to be done is neither more nor less than to develop above all things other great elements of civilization now held in check, which shall take

¹The point of view that Yale can not possibly be behind Harvard in what it offers its students seems to be conspicuous throughout the development of the department in this university. But the feature of conservatism, which George Trumbull Ladd has assigned to Yale in his *Essays on the Higher Education*, is easily recognized.

their rightful place in the United States; which shall modify the mercantile spirit; which shall hold it in check while stimulating it; which shall make the history of our country something greater and broader than anything we have reached or ever can reach under the sway of mercantilism alone. What shall be these counter elements of civilization? Monarchy, aristocracy, militarism we could not have if we would, we would not have if we could; what shall we have?

I answer simply that we must do all that we can to rear greater fabrics of philosophic thought, literary thought—scientific, artistic, political thought; to summon young men more and more into these fields, not as a matter of taste or social opportunity, but as a patriotic duty; to hold before them not the incentive of mere gain or of mere pleasure or of mere reputation, but the ideal of a new and better civilization. The greatest work which the coming century has to do in this country is to build up an aristocracy of thought and feeling which shall hold its own against the aristocracy of mercantilism. I would have, more and more, the appeal made to every young man who feels within him the ability for good or great things in any of these higher fields, to devote his powers to them as a sacred duty, no matter how strongly the mercantile spirit may draw him.

I would have this idea preached early and late, that the man who has powers fitted for this higher service, for the discovery or proclamation of religious truth or scientific truth, for literature, for science, for art, is false to himself and false to his country, if he deliberately put his talents at the service of the mercantile spirit.

This address will ever be a fine tribute to the ideal spirit which is nurtured in Yale. Of course, the aristocracy of thought and feeling expected of the new century is not limited to the thought that emanates from Yale, but will be strengthened by all universities in which study is pursued in the spirit of German idealism. It can not be denied that the German departments in this sense are to be considered the nurseries of an incomparable progress in culture. Whoever undertakes to write a history of American culture must be especially mindful of them, because they are the most important means of uniting German idealism with American energy.

Facts concerning the course of study as it was conducted until 1900 are given in the following extract from one of the more recent catalogues:

GERMAN—The student who has passed the admission examination in German, may continue the study of German during each of the four years of his college course, if he so elect; the student who has not passed the admission examination in German may, if he desire, begin the study of German in either freshman or sophomore year, and pursue it for four or for three years; no elementary instruction in the language is given to the juniors or seniors.

The courses of work for the successive years may be outlined as follows: During the first year the work consists of German grammar; translation of easy English phrases, sentences, and connected prose into German; and of easy German prose into English. Constant sight translation is used as a means for developing and strengthening the student's vocabulary and for freeing him from dependence upon the lexicon and from the word-by-word methods which its use encourages. Especial care also is devoted to pronunciation. The work of the second year continues and extends that of the first year, taking up the translation of more difficult German prose, both with previous preparation and at sight, the study of word-formation, and the translation of more difficult English prose into German. Throughout the two years the aim in reading German is to cover as much ground as possible—from 500 pages upward—in the belief that thereby the student will acquire more command of the language than when a smaller amount is read with rigid attention to grammatical details. It is expected that at the end of the second year the student will have adequate preparation for the use of the language in his work in other branches of study. Those, therefore, who are studying German solely for this end in view may perhaps discontinue class study at this point; but no student should begin the language unless he expects to devote at least two years to its study.

For the remaining years the courses vary from year to year; but opportunity is given for the critical study of works of leading authors, and for the study of periods in the history of German literature. Advanced courses are offered also in earlier German literature and in the historical development of the language.

German readings are given by the instructors, outside of the regular college work, and a course in advanced composition is given, in which German alone is spoken. German is constantly read aloud in the class-room, and efforts are made

to improve the student's pronunciation and to help him to acquire some facility in expressing his ideas in German. But it is not a leading aim in the instruction in German to enable the student to converse in that language. Training in the ordinary conversational idiom may be had more profitably elsewhere and can not form any considerable part of the class-room work. The student may acquire the language as a tool for use in other departments of study, and may come in contact with the best works of German literature, studying their form and contents, and the lives and environment of their authors; fluency in conversation must be acquired where the conditions are more fitted to the object which they are to effect.

In 1900 the number of courses were 9 for beginners, and 8 for graduates, besides a weekly course of two hours in Swedish.

CORNELL.

The latest register, which reveals plainly the transition to the elective system inaugurated one or two years ago, says, concerning the aims and course of German instruction, as follows:

The aim of the first two courses in German, besides preparing the student for progressive and independent work, is to afford those who have not a full classical training, some grammatical and linguistic discipline, an insight into the relations between German and English, and a certain degree of literary culture.

In course 1 Joynes-Meissner's Grammar and Brandt's Reader are used, accompanied by exercises in writing German and translation at sight. Later in the year easy novels or plays are translated.

In course 2 standard German classics are translated, and special attention is paid to the study of etymology and syntax, and to reading at sight.

The later work, in the form of lectures and recitations, includes the study of German history, literature, and mythology; and courses are given, varying from year to year, embracing the works of the leading authors. Classes are also formed in composition and conversation, and recent dramatic literature and the writings of living novelists are read. Instruction is further provided in Old and Middle High German and other Germanic dialects.

The seminary system of study for advanced students has been employed in the department for several years with satisfactory results. To different members of the seminary classes different portions of the same general subject are assigned, with references to the proper authorities or sources; or individual members pursue individual courses of reading under the supervision of the professor in charge. Lectures for those intending to be teachers are also given on class-room methods and theories of instruction in the modern languages; and generous provision has been made by the university for the use of lantern slides for illustrative purposes. The seminary room in the general library building is already equipped with a good working library, which is steadily increasing in extent. The gift to the University of the Zarncke library has materially enlarged the resources of the seminary and leaves little to be desired.

Course 1, which can not be taken to make up an entrance deficiency, is for beginners in German.

Course 2, which can not be taken to make up an entrance deficiency, is otherwise open to those who have had the equivalent of course 1.

Courses 3-19 are open, under the restrictions hereafter noted, to those only who have had at least the equivalent of courses 1 and 2.

Course 1, and, under certain restrictions, courses 2, 3, 4, and 5 are open to freshmen.

COURSES IN GERMAN.

1. German Grammar and Reader. Three weeks.
2. Schiller's Wilhelm Tell, Freytag's Journalisten, Goethe's Hermann und Dorothea. Three weeks.
- 3a. Elementary German composition and conversation; translation; translation into German of selected passages adapted from German originals, and conversation on the texts thus prepared. One week. Open to those who have had course 1 or an equivalent.
- 3b. Intermediate course in German composition and conversation. Translation of easy English extracts into German. During the early part of the course con-

siderable attention will be given to conversation. One week. Open, by application, to those who have had course 3a, or an equivalent.

3c. Advanced German composition. Those intending to teach German are specially advised to elect this course. One week. Open, by application, to those who have had courses 3a and 3b, or an equivalent.

4. Heine's Life and Works. Selections from Heine's prose and poetry, with an examination of his views on literature, art, politics, and religion; and some study of the metrical and linguistic characteristics of his verse. Three weeks.

5. Goethe's Dramas. Three weeks.

6. Goethe's Faust. Parts I and II. Three weeks.

7. German Lyrical Poetry from Luther to the present day. Two weeks.

8. Deutsche Volkslieder. Selections from songs of sentiment and of religion, of various callings, including soldier and student songs, children's rhymes, and legendary and narrative ballads. One week.

9. Schiller's Life and Works, especially his dramatic writings and correspondence with Goethe. Three weeks.

10. The Modern Novel and Drama, illustrated chiefly by the works of Freytag, Sudermann, and Hauptmann. Three weeks. First half year.

11. German Seminary. The history of German literature. Two weeks.

12. Life and Writings of Richard Wagner. Selections from the texts of Richard Wagner's musical dramas including *Der Fliegende Holländer*, *Tannhäuser*, *Lohengrin*, *Parsifal*, *Tristan und Isolde*, and the *Nibelungenring*, with a study of the legendary background, and with illustrations and elucidations from Wagner's other writings. Three hours weekly.

13. The Novel of the Nineteenth Century. Mainly historical. Scheffel, Freytag, Hauff. Second half year. Open to students who have had two years of German.

14. Middle High German. Beginning course. Selections from Middle High German prose and poetry. Two hours weekly.

15. Readings from Herder's *Cid* and Klopstock's *Messias*. First half year. Two weeks.

16. German Seminary. Middle High German epic and lyric poetry. First half year. One week.

17. Lessing's Life and Writings. Early dramas and *Nathan der Weise*; first half year. Prose works, art and criticism; second half year. Two weeks.

18. German Seminary. History of the German language. Methods of modern language study and teaching, including questions of pronunciation, syntax, etymology, prose composition, German chirography, and school equipment. Open, by application, to those intending to teach. One week.

19. Courses (of Middle High German) are given like the courses 8, 12, 17, and 18, not during the current year, but in 1901-2.

Active professors are the following:

Horatio Stevens White, A. B., professor of the German language and literature, and dean of the university faculty.

Waterman Thomas Hewett, A. B., Ph. D., professor of the German language and literature.

George Burrigge Viles, A. M., and George Maxwell Howe, A. M., instructors in German.

For the summer courses Prof. Dr. Herm. Schoenfeld, of the Columbian University in Washington, D. C., is added.

The course of the summer courses in 1901, is as follows:

COURSE FOR TEACHERS.

A. Methods of instruction in the modern languages; recent theories; report of the "Committee of Twelve." The teacher's equipment: A discussion of representative works for linguistic study, histories of literature, and biographies; text-books, dictionaries, grammars, and commentaries.

Introductory phonetics and historical grammar, moot points in pronunciation. Syntax and modern German verse. Two hours a week.

TRANSLATION COURSE.

B. Reading and interpretation of classical works of Goethe, Schiller, and Lessing, comprising those more often read in advanced classes. The choice will be

made from Goetz von Berlichingen, Iphigenie, Tasso, Die Braut von Messina, Die Jungfrau von Orleans, Wallenstein, and Nathan der Weise. Three hours a week.

C. The rapid reading, with comment, of the advanced requirements for admission in German, Schiller's Wilhelm Tell, Goethe's Hermann und Dorothea, and Lessing's Minna von Barnhelm. Sight translation will be practiced on certain days in the week, and there will be tests of reading done outside the class. The textbook in this will be Freytag's Verlorene Handschrift. Daily except Saturday.

D. Lectures in German upon the history of German civilization and literature from 1750 to the present time. Daily except Saturday.

E. Practical exercises in German conversation and composition. The course will be conducted entirely in German, in order to familiarize the student with a working vocabulary. Three hours a week.

In what spirit this university is conducted, which, as has been stated before, was organized by Andrew D. White, may be seen from the following quotation taken from an oration of the then president of the institution, Charles Kendall Adams. The oration is entitled "Washington and the higher education."¹

There is something in the persistency and the nobility of Washington's thought on the subject of a national university that reminds us of what occurred only ten years later at the capital of one of the nations of Europe. Prussia had fallen under the contemptuous displeasure of Napoleon; had been humiliated and well nigh destroyed. Despoiled of her fortresses, robbed of half her territory, her army, even for purposes of defense, reduced to a handful of men, to her more than to any other of Napoleon's foes it had been permitted—

"To read the book of fate,
And see the revolution of the times
Make mountains level, and the continent,
Weary of solid firmness, melt itself
Into the sea."

But through the welter of that sad ruin there rang out the clear voice of a philosopher, proclaiming that the only gospel of salvation for Prussia was the gospel of education. At the very moment when French bayonets were in possession of Berlin, Fichte lifted up his voice in the "Reden an die deutsche Nation," in which throughout the elaborate argument of 14 lectures, there was this ever-recurring refrain: "Education is the only means by which we can be rescued from our present helpless condition." The keynote of that appeal, the pathetic eloquence of which resounded throughout Germany, was in the sentence: "I hope to convince Germans that nothing but education can rescue us from the miseries that overwhelm us." And the foundation of his argument was laid in a doctrine which he has condensed into a single sentence. "Education," said he, "education, as hitherto conducted by the church, has aimed only at securing for men happiness in another life; but this is not enough, for men need to be taught how to bear themselves in the present life, so as to do their duty to the State, to others, and to themselves." The lectures, which were little else than an eloquent and impassioned elaboration of this theme, made so profound an impression upon the country, and especially upon the Government, that a commission of five of the most eminent scholars of Prussia was appointed to elaborate and recommend a system that would embody these ideas. All grades of education were remodeled and reduced to substantial uniformity of system. To us, in this discussion, it is of chief interest to note that one of the first fruits of the movement was the founding of the university at Berlin, a university which, now that three-quarters of a century have passed, brings annually together for the most advanced learning the world can give more than 5,000 of the most intelligent and the most aspiring young men of Germany. It would be easy to point out how the works of such men as Niebuhr and Ranke and Mommsen and Savigny and Boeckl and Virchow and Helmholz and others of kindred renown, each of whom, in his sphere, has stood at the very pinnacle of human knowledge, have inspired the thoughts and illuminated the paths of scholars in all parts of the world. But, fascinating as this theme would be, it would be more to our purpose to-day to contemplate the effect of this system of education upon the German people and the German nation. It must, however, suffice simply to say that it has taken the shattered and impoverished and disheartened Germany of 1810 and made it the united and prosperous and confident Germany of the present day.

The present president is Jacob Gould Schurman. During his presidency the New York State College of Forestry was connected with the university. This col-

¹ An address delivered before Cornell University, February 23, 1888, p. 35.

lege, under the leadership of Professor Dr. Fernow, is destined to introduce German science of forestry. The number of students in the university registered in 1900 was 2,270, of whom nearly one-fourth participated in the courses in German (1900-1901: 511). The summer courses were attended by 445 students. Of this number only 42 took part in the only two German courses. During the current year five courses in German will be offered, and Professor Schoenfeld is added as a valuable addition to the faculty. A large increase in the number of students of German is expected.

Concerning the library the third part of this article gives information. A little pamphlet, entitled "What profession shall I choose? How to fit for it?" explains the objects of the university. This was published in Ithaca in 1884, and serves as a valuable guide to students.

PRINCETON.

Although the third oldest seat of higher learning in the country, this institution is one of the youngest universities, having received the title on its one hundred and fiftieth anniversary, October 21, 1896. Notwithstanding that the number of its students has considerably increased (428 in 1880, according to Thwing; at present, 1,196), this institution is twentieth in the order of American universities according to attendance. The large participation in German instruction is therefore the more encouraging. The German department has two divisions: the academic, in which Professors Humphreys and Hoskins and Instructor Beam teach, and the school of sciences (technical school), conducted by Professor Huss and Instructor Priest.

In the technical school German is obligatory for the freshmen, who numbered 117 in the year 1900, and for the sophomores, of whom there were 92 in the year 1900. From then on German is optional, and about one-fourth of all the students take the course.

In the academic department in 1899-1900 eight courses were held for elementary and advanced instruction in the German language, six in the history of German literature, and eight in Middle High German, Old High German, Old Icelandic, and historical German grammar. Moreover the opportunity was offered to students of German to take part in the courses in Anglo-Saxon (*Beowulf*) and Gothic held in the English seminary. With the exception of the absence of the Scandinavian language and literature the course of study resembles that of Yale and does not reach the present position of Columbia. In the school of science ten courses are held for beginners and advanced students in grammar, composition, conversation, scientific monographs, and history of literature.

UNIVERSITY OF PENNSYLVANIA.

We have a comprehensive report on German at the University of Pennsylvania by Professor Learned,¹ who quotes a number of details relative to the eighteenth century. This most competent authority makes the following statements concerning the development of German study in the nineteenth century:

The revival of German studies at the University of Pennsylvania begins with the researches of Samuel Stedman Haldeman, professor of natural history, 1850-1853, and professor of comparative philology, 1869-1880. Professor Haldeman contributed 10 studies on conchology, 36 on entomology, 7 on geology and chemistry, 7 on archaeology, 32 on philology, and 28 on other subjects. Of the 32 contributions to philology, one is of particular importance as inaugurating the study of German dialects in America. This was a paper entitled "On the German vernacular of Pennsylvania," published in the *Transactions of the American Philological*

¹Opening of the Bechstein Germanic Library. Addresses, pp. 33-53. The extract is not worthy as being, so far as we know, the only detailed authentic account of the development of the German department in one of the most important universities of the country.

Association for 1869-1870, read also before the Philological Society of London, 1870, and published separately with prefatory notice by A. J. Ellis, under the title, *Pennsylvania Dutch, A Dialect of South German with an Infusion of English*, Philadelphia, 1872. It was the instinct and experience of a naturalist that led Professor Haldeman to the study of language and gave his researches their peculiar value. The relation of linguistics to etymology attracted him in particular and stimulated his studies *On the Phonology of the Wyandots* (1846), *On Some Points in Linguistic Ethnology, Relations between the Chinese and Indo-European Languages* (1856) and similar subjects, in which the influence of Wilhelm von Humboldt seems clearly traceable. At the time when Haldeman was writing his study on Pennsylvania Dutch, dialect study in Germany was still in the formative stage. Haldeman's Pennsylvania Dutch may be regarded as a pioneer study, first in American dialectology, and secondly in comparative study of modern German dialects.

The point of view, and at the same time the importance of Professor Haldeman's study, is admirably set forth by Mr. Alexander J. Ellis in his prefatory notice to his *Early English Pronunciation* (published in 1867), as follows:

"Sufficient importance does not seem to have been hitherto attached to watching the growth and change of living languages. We have devoted our philological energies to the study of dead tongues which we could not pronounce, and have therefore been compelled to compare by letters rather than by sounds, and which we know only in the form impressed upon them by scholars of various times. The form in which they were originally written is forever concealed. The form in which they appear in the earliest manuscripts has practically never been published, but has to be painfully collected from a mass of various readings. The form we know is a critical, conjectural form, patched up by men distinguished for scholarship, but for the most part entirely ignorant of the laws which govern the change of speech. The very orthography is mediæval. We are thus enabled to see as little of the real genesis of language in form, in sound, in grammatical and logical instruction—in short, in the real truth of philological investigation, the relation of thought to speech sound—as the study of a full-grown salmon would enable us to judge of the marvelous development of that beautiful fish. Such studies as the present will, I hope, serve among others to stimulate exertion in the new direction. We can not learn life by the study of fossils alone."

Simultaneously with the researches of Professor Haldeman in the Pennsylvania Dutch his colleague, Oswald Seidensticker, professor of German in the university, was breaking ground in another field of German-American culture—the history and literature of the German pioneer in America.

As early as 1864 Professor Seidensticker published a paper entitled "*Schiller im Englischen*." This study seems to have served only as the door to a more attractive department, for his studies for the next twenty years lay chiefly in the earlier period of German-American history and literature, and it was only toward the end of his career that he once more published a paper more closely related to the one of 1864 under the title, "*The relation of English and German literature in the eighteenth century*."

The most important work of his he published during the last year of his life (1893). It is entitled *The First Century of German Printing in America, 1728-1830* (Philadelphia).

The value of this work for the study of American culture has not been duly appreciated beyond a limited circle, partly because most Anglo-American historians have been inexcusably slow in recognizing the importance of the German element in the growth of the great American Republic. Then, too, it must stand as an menacing reflection upon the German-American's interest in his own history that *Der deutsche Pionier*, which for years contributed to the study of German history and culture in America, was finally allowed to be discontinued for want of even a modest number of subscribers.

The German in America has played his part most nobly. He tills to-day our richest farms and turns the skillful hand in our most important trades; he helps to fight our battles and teaches us the arts of war; he develops American industry and controls great avenues of American commerce; he teaches us the value of literature and supplies us with a new education and a new science. The presence of 10,000,000 Americans in our population in whose veins German blood flows justifies the study of the traditions of this sturdy race. It is in emphasizing the significance of such facts that the importance of the work of Professor Seidensticker and those laboring in the same field has rendered its greatest service.

This brief survey has made it apparent that the traditions of German studies at the University of Pennsylvania have been at each revival epoch in close touch with the literature and science of the fatherland, and have fostered truly national

American ideals by investigating the cultural problems of the German settler in his adopted fatherland.

With this heritage of German traditions it remains for us to develop our resources in accordance with the most enlightened methods of the new science of linguistics, which has inaugurated a new epoch in the study of language and literature. Here is the place for a distinctly American school of Germanics. The conditions and the resources are here for such an enterprise. Even a precedent is not wanting, for the "Institut" of Kunze and Hehnuth may be regarded as a faint prototype of what might be developed in the more distant future.

What conditions! Here is the cradle of German culture in America, whence thousands of sturdy pioneers have gone forth, breaking new paths to the shore of the Pacific.

The speaker closed his remarkably interesting lecture with the following exposition of his scientific working plan:

The programme justified by these traditions and resources is ample and distinctly national and American:

The scientific study of the Germanic dialects of America—High German (Swiss, Suabian, Bavarian), Midland German (Frankish, Saxon), Low German (Platt and Netherlandish), Norse (Swedish, Danish, Norwegian, Icelandic). All of these dialects are represented as living speech in America.

The study of German literature in America (German literature written here and the influence of the literature of Germany on our own).

The German folk-lore and culture of America (manners, customs, and other forms of German culture in American life).

These subjects lead naturally and necessarily to the comparative study of Germanic dialects and literatures of Europe through all the periods of their history. Thus we may justify each step by the claims of our national cultural genealogy.

It is to the achievement of the fullest success of this school of Germanics, in the estimation not only of contemporaneous American and European scholars, but in the more calm and severe judgment of the future, that we invite the Germans of the city of Philadelphia and of the country at large to lend their interest and cooperation by contributing serial publications, books, pamphlets, and other material relating to the Germans in America.

This is a work in which every German-American as well as Anglo-American may take part without fear of encountering social, political, or race prejudice and with the consciousness that he is aiding in strengthening the bonds which unite the two great cultures of modern civilization. Having once formed such an alliance among ourselves, the hearts of the fatherland will respond to the great work of preserving the history, language, literature, and culture of the German in America.

This programme has meanwhile become to a good degree an actuality. The catalogue for the current year enumerates no less than 11 courses for graduate students in the philosophical faculty.

The graduate courses in Germanic philology are grouped in cycles of three years, so as to enable the student to pursue his studies in all the representative periods of Germanic languages and literatures—Gothic, Old High German, Middle High German, New High German (including the sixteenth, seventeenth, eighteenth, and nineteenth centuries). During the cycle of three years at least one seminary course will be offered in each one of the more important periods. The Germanic seminary devotes three hours a week to German ballads. Other courses include Old Norse poetry, Gothic, Middle High German, as well as seventeenth century German; also introduction to Germanic philology and Goethe and Schiller (1794-1805). An especially interesting lecture is that of Professor Learned on German literature in America, in which the literary relations of Germany and America in the nineteenth century, with special reference to the influence of German literature on Anglo-American literature, are treated.

Another important institution is the Germanic Association. The work of this association, of which the instructors and advanced graduate students are members, is an essential part of the work in German. An original paper is presented at each meeting. This may be followed by minor communications.

Lastly, there is a class in German conversation. Students who elect German as

a major are required to join the class, unless they already have a satisfactory command of colloquial German.

All graduate courses are given by Professor Learned and by the instructor, Dr. Daniel B. Shumway; the elementary instruction in the college is entirely separated from the department sketched in the foregoing.

As a consequence of Learned's extraordinary efforts in developing his department, the fact may be recorded that the attendance upon the German courses here is now about 325, a gain of something over 100 in the last two years. This indicates a gratifying increase in the interest of German in the old cradle of German culture in America. The elementary instruction in German is conducted by Edward Charles Wesselhoeft, A. M., instructor, and Ellwood Conly Parry, assistant instructor.

Concerning the very extensive German book treasures in Philadelphia, the next chief part of this article will give the required information.

Frequently German lectures (in the vernacular) are held in the university. Thus, in 1897 Mr. L. Viereck, of New York, spoke on "Political parties in Germany," in 1900 on "Franz Lieber," and in 1901 on "Remembrances of Germany's great historical times." Mr. Couried, stage director, read a lecture in 1900 in German on the "German stage" and on Schiller's *Das Lied der Glocke*.

The total attendance of this university in 1901 was 2,573.

JOHNS HOPKINS.

As regards scientific publications, no American university deserves to be mentioned with greater honor than the Johns Hopkins, of Baltimore. Its publications stand out alone in the United States and have exerted a favorable influence on other universities.

This judgment of a competent authority¹ dates from the year 1895 and has lost none of its weight in the meantime. What the institution has done is the more meritorious, as its financial condition has been precarious since its foundation, and the legislature of Maryland has failed to follow the example given by other States in their liberal support of the universities within their limits.²

Although this university is not a generation old and is limited to two faculties—a philosophical and a medical faculty—it can boast of its graduates being particularly successful academic teachers, as may be learned from the biographical section of this article. Finally, its German department is by no means one of the largest—the comparatively small total attendance would make this an impossibility—though it is one of the best in the country. It was arranged by Prof. Herman Carl George Brandt, who taught until the year 1883, when he accepted a call to Hamilton College. Since then it has been under the direction of Prof. Henry Wood, assisted by the following gentlemen:

Dr. B. J. Vos, associate professor of German.

Dr. T. S. Baker, instructor in German.

Mr. Julius Hofmann.

The work done by the German department is mentioned in the following extract taken from the twenty-third annual report of the president:

The German Seminary, under the direction of Professor Wood, met three times weekly through the year. The subject for the first half year was Goethe's Lyrical Poems. They were studied chronologically in a selection designed to illustrate the change and growth in Goethe's language and style. Particular attention was devoted to the *Leipziger Liederbuch*, the lyrics of the first Weimar period, and the productions of the *Balladenjahr* (1797). The poems were then considered, singly and in groups, as establishing or completing modern lyrical types in literature. During the second half year the *Nibelungenlied* was studied. The first

¹ Zimmermann, *Universities in the United States*, p. 92.

² Compare James B. Angell, "The State universities of the West" in the *Studies in Historical and Political Science*. Baltimore: 1898.

sixteen *Aventiuren* (except the fourth, eighth, and eleventh) were read, together with parts of *Aventiuren* 21, 25, 27, 28, 30, 33, 37, 38, 39. The text of Lachmann was used as a basis, with the editions of Bartsch and Zarncke for the *plussrophes* of MSS. B and C. The selections were made with reference to the special subjects assigned to the members of the seminary. The chief of these were: Lachmann's criteria of genuineness, the *Kürenberger-trophe* and the *Nibelungen* poetry of Austria, Origins of the *Nibelungen* meter, Laistner's *Archetypus der Nibelungen*, Holtzmann and the MS. C, *Plussrophes* and modern criticism, the *Siegfried* myth, Dietrich of Bern in *Nibelungenlied* und *Klage*.

The Germanic Society, which is composed of the director of the seminary and the instructors and graduate students in German, held sixteen meetings during the year, in an evening session. Besides reviews and reports, the following papers were read, some of them presenting completed investigations and others giving preliminary results of studies still in progress: Early German Versions of the Bible; the first person plural imperative in German; the close of Goethe's Tasso as a literary problem; Poe's House of Usher and its German source; early editions of German works appearing in America; the Gothic u-declension.

Professor Wood gave a course in Gothic and the elements of comparative German grammar, twice weekly, through the year. Braune's *Gotische Grammatik* was studied, after which parts of *Ulfilas* and the *Skeireins* were interpreted, with Bernhardt's larger text as a basis. Streitberg's *Urgermanische Grammatik* was read entire, and was accompanied by practical exercises designed to illustrate the principles of sound-change and word-formation for the several Teutonic languages.

A class in Old Saxon, conducted by Professor Wood, met twice weekly, during the first half-year. The *Heliand* was read, with the editions of Sievers and Piper as a basis. Particular attention was given to recent aspects of the *Praefatio*, as tending to solve questions of source, scope, and authorship of the poem. Correspondence between Old Saxon and English syntax were studied, with special reference to their application to text criticism. The *Genesis* fragments were also read.

A course in Schiller's dramas, weekly through the year, was given by Professor Wood. All the plays were read, including the fragments "*Demetrius*" and "*Die Malteser*." Schiller's earlier pieces were compared with the classicizing and Senecan variety of the Elizabethan drama, and the similarities noted were also pointed out in the case of Lessing's "*Emilia Galotti*." Schiller's later tragedies were then studied, as untinge elements of classicism and romanticism in the establishment of new tendencies for the modern drama. Particular attention was devoted to Walenstein and Demetrius as the two most characteristic examples of the new type.

The other work of Professor Wood was devoted to instruction in language and literature in the undergraduate major and minor course.

Professor Vos taught two hours—modern Dutch, Middle High German, and history of German literature in the eleventh century. Besides, he gave a number of lectures to undergraduates.

Dr. Baker gave a graduate course on the German novel in the eighteenth century. The period studied was from the *Robinsonaden* to Jean Paul. Much attention was given to foreign influence, and particularly to Rousseau and the English contemporary novelists. In addition to the foregoing Dr. Baker gave undergraduate and special courses.

Mr. Hofmann met a class of graduates for scientific reading twice a week. He also conducted a class in conversational German weekly through the year.

To complete this account the following extract from the Register for 1898-99 may serve:

In the German Seminary, in which the graduate instruction centers, nearly equal attention is devoted to German literature and German philology. To enter upon the work of the seminary in literature the student should possess a knowledge of German equivalent to that imparted in the undergraduate courses hereinafter mentioned, supplemented by private readings. For the seminary work in philology it is desirable in addition that preliminary courses in Gothic and Middle High German should be first completed, and these may be taken with advantage by the student immediately upon entering. All graduate students of German are required to share in both the philological and literary work, and to direct their efforts to the attainment of broad results which may serve as the foundation of scientific work and of successful teaching; but the seminary and the allied graduate courses are believed to offer also sufficient opportunity and encouragement for the prosecution of chosen lines of work, whether on the linguistic or literary side, in accordance with individual capacity and bent. In this way opportunity for independent research is afforded within the framework of organized effort

directed toward the attainment of results which concern the seminary as a whole and toward which each member is expected to contribute his share.

The subjects selected for the seminary during recent years have been as follows: 1894-95, *Minneangsfrühling*, German literature in the eighteenth century; 1895-96, Goethe and Schiller (1786-1805), Walther von der Vogelweide; 1896-97, Goethe's *Faust*, *Parzival*; 1897-98, Goethe's *Lyrical Poems*, *Nibelungenlied*; 1898-99, Storm and stress and early romanticism, Walther von der Vogelweide.

The Germanic Society, which meets fortnightly, supplements the work of the German Seminary; before it are presented not only reports on articles in current journals, but also successive results of studies by the members. The chief object of the society is to foster and guide the aptitude for more sustained individual investigation than the seminary proper offers scope for. Lists of the papers presented and discussed are given in the yearly reports.

In addition to the work of the seminary (three meetings a week) other advanced courses are given. For example, in 1898-99 Professor Wood gave courses in Gothic and Old Norse (Sagas). Dr. Vos conducted classes in Middle High German, Vondel, and Middle Dutch, and lectured on the history of rhyme. A course on contemporary German drama was given by Dr. Baker.

The undergraduate courses in German are conducted chiefly by Associate Professor Vos, aided by Dr. T. S. Baker, with such other assistance as may from time to time be required. A course in elementary German is given for candidates for matriculation who have entered with Greek. This is followed by the regular work in German during the first college year, a course required of all undergraduates. Nearly equal portions of the German drama and of German literary prose are read. Private readings and weekly exercises in prose composition supplement the class readings.

Undergraduates in Group VII who elect German, or undergraduates in any of the seven groups who substitute German at this point in their course, pursue the study during a second year. The readings from the classical period are continued in texts of greater difficulty, and instruction is given in the history of German literature and in the writing of German prose.

An elective course (rapid reading of contemporary literature) is offered to undergraduates who have completed the work in German of the first college year. A second elective in scientific readings is open to undergraduates who are preparing to enter the medical school.

Classes are also provided in conversational German and in historical and scientific readings for graduates who lack the ability to read the language at sight.

It seems that the interest in the study of German does not make such constant progress here as in other universities. This is plainly seen from the following statistics, taken from the president's annual report:

	1893-94.	1894-95.	1895-96.	1896-97.	1897-98.
Total number of enrolled students	522	589	596	520	641
Number participating in German courses	103	152	167	139	170

According to a circular of April, 1900, there were only 105 students taking German, namely, in the German Seminary, 11; Germanic Society, 14; Gothic, 5; Old Norse, 6; beginnings of German classicism, 10; modern German grammar, 9; history of rhyme in Middle High German, 7; English influence on German literature in the eighteenth century, 6; history of German literature, 14; minor course A, 39; minor course B (Goethe), 14; elementary German, 6; scientific readings, 8; reading in contemporary German literature, 5; historical readings, 4; oral exercises, 6.

Since of the total number enrolled, to wit, 649 students in the last scholastic year, 252 attended the medical faculty, there were still more than one-fourth of the remaining students enrolled in German. The romance languages had only an attendance of 78, equaling one-fifth of the total number.

UNIVERSITY OF MICHIGAN.

An account has already been given of the foundation and history of this university. President Dr. James B. Angell holds a position similar to that of Presi-

dents Eliot and Gilman. He was supported in his labors by B. A. Hinsdale, professor of pedagogics, lately deceased, who made a special study of German influences on the organization of the American educational system. Consequently, despite the painful loss of Professor Hensch, the growth of the German department has been extraordinary. With a total of 3,813 students the German attendance is second largest; about 700 literary students each semester and 100 engineer students, according to a report from the ordinary, February 13, 1901.

The teachers for the year 1900 were as follows: Max Winkler, Ph. D., acting professor of German; George Hempl, Ph. D., professor of English philology and general linguistics; Ernst H. Meusel, Ph. D., assistant professor of German; Tobias Diekhoff, Ph. D., Warren W. Florer, Ph. D., Edwin C. Roedder,¹ Ph. D., Ewald Boucke, Ph. D., Jonathan A. C. Hildner, Ph. D., instructors in German.

It will be observed that the corps of teachers of this faculty is composed exclusively of graduates with the degree of doctor of philosophy.

The courses are more numerous than at most universities, and are as follows:

First and second. Elementary courses. Pronunciation, grammar, and easy reading, with practice in speaking and writing German.

Third. Modern prose, narrative and dramatic, with practice in speaking and writing German.

Fourth. A drama of Lessing, Goethe, or Schiller, with collateral prose reading, and practice in speaking and writing German.

Fifth and sixth. (Each during one session.) Third year electives: (a) Goethe's Goetz von Berlichingen, and Die Leiden des jungen Werthers; Schiller's Die Räuber; (b) Schiller's Wallenstein, with extracts from the history of the Thirty Years' War; (c) Schiller's philosophic writings; (d) Goethe's Iphigenie, Tasso, and Hermann und Dorothea; (e) Lessing's Nathan, Anti-Goeze, and The Education of the Human Race; (f) Laokoon; (g) German composition; (h) German themes; (i) scientific prose; (k) historical prose; (l) Klee's German mythology, with supplementary reading.

Seventh and eighth. Goethe's Faust, Parts I and II.

Ninth. Introduction to Middle High German.

Tenth. Methods of teaching modern foreign languages.

Eleventh. Modern German sounds.

Twelfth. German syntax.

Thirteenth and fourteenth. History of German literature.

Fifteenth and sixteenth. German romanticism.

Seventeenth and eighteenth. German civilization. Lectures and readings from Freytag's Bilder aus der deutschen Vergangenheit.

Nineteenth. Old High German.

Twentieth. The Middle High German Folk-epic.

Twenty-first. Proseminary in modern German literature. The storm and stress movement.

Twenty-second. The literature of the sixteenth century.

Twenty-third. Proseminary in Old High German.

Besides, there are courses in Gothic (phonology and morphology, the epistles, Ulfilas), Scandinavian (the ancient Edda and Old Icelandic), and Anglo-Saxon.

The five courses for engineers are of an elementary character and are all conducted by John Dieterle, A. B., instructor in German.

Professor Winkler writes concerning the work of the year 1901: "The graduate work of the department is promising. This year we have about fifteen students working for the master's or doctor's degree."

The German library is very small. Of a total of more than 100,000 volumes, from 6,000 to 7,000 are German, and 953 of these belong to the Goethe collection.

¹ Since called to the University of Wisconsin.

Some very interesting facts concerning the latter are given further on under the head of "Silent universities." The total number of students in 1900 was 3,700.

UNIVERSITY OF CHICAGO.

This university, founded¹ July 1, 1891, was formally opened October 1, 1892, by exercises in the Cobb Lecture Hall, in the presence of an audience of 600. Although the youngest among the 14 leading universities of the country, it has quickly acquired an influential position among higher institutions, owing to its excellent management and the large financial resources at command. The best choice was made in the selection for professorships and some of the chairs are filled by Germans.

A most prominent scholar gained for the university was Dr. Hermann Eduard von Holst. Born June 19, 1841, in Livonia, he emigrated as a young man to America, "where he engaged in literary and editorial work in New York." In 1872 he was called to the newly founded University of Strasburg as professor of history, and two years later to the chair of modern history at the University of Freiburg. From there, in 1892, he assumed his present duties, which, unfortunately, he has been compelled to give up on account of his health. We shall mention only his chief work, translated under the title: *The Constitutional and Political History of the United States* (*Die Verfassung und Demokratie der Vereinigten Staaten von America*).

A contributor to the "Westen," and a journalist whose articles always contain reliable information, has recently published the following graphic account of the work and arrangement of the German department at the University of Chicago.²

The fourteenth, the department of Germanic languages and literatures, is equipped with an excellent corps of teachers. The ever more widely spreading conviction that no profound study in any branch of science is possible without reading the chief German works on the subject in the original has made students understand the necessity of knowing German.

The few current phrases that, learned parrot-like, formerly satisfied an American conversant with English alone are insufficient for present times; the teacher of conversation who, without any philologic or literary preparation, undertakes private instruction can only in exceptional instances meet the want of pleasure-seeking tourists. Let us throw the mantle of charity over the average work of private schools. The so called high schools, which are far from carrying out their varied programme, and make the strangest concessions to their half-grown and mentally immature pupils respecting the selection of their favorite studies, were recently characterized in strong and appropriate terms in the Illinois Staats Zeitung as follows:

"Very little is taught and learned, but it is always better than nothing. German instruction in our schools is a weak branch of public education, and this branch bears but a few green twigs. The Germans of Chicago request our school boards to lead more sap to this branch, that it may grow and blossom."

Under such conditions, which, however, give no occasion for despair, and which educated Germans should and could more zealously endeavor to ameliorate, the work of a university is altogether different from what it is elsewhere. * * *

Poor results would be obtained by beginning at the "top," burdening freshmen (*Füchsen*) with philological investigations or lectures on the history of literature. The way must be cleared: reading must be taught; etymology, grossly neglected—I speak from long experience—can not be cursorily reviewed, but must be studied again from the very beginning; in the course of about two full college years good results may be attained by all who persevere—more talented students may succeed in less time. Whoever thinks that the main work is to be done by pupils makes a great mistake. It falls to the lot of the teacher, who, not bound or handicapped

¹ The original University of Chicago was chartered in 1857, and continued in existence until 1886, when a series of financial difficulties caused its discontinuance. About two years later John D. Rockefeller and Prof. Wm. R. Harper, of Yale, united their efforts to reestablish the institution. The present charter dates from September 10, 1890, Professor Harper's entrance into office from July 1, 1891. The total endowments of John D. Rockefeller alone amount to more than \$10,000,000.

² The "Westen" of February 4, 1900.

by any school-board regulation, must, in accord with prominent examples, invent by his own ingenuity a thoroughly scientific and, at the same time, successful and agreeable method of instruction.

After a freshman has been thoroughly drilled in the principles of grammar, acquired facility in translation, retranslation, and composition, and has had his ear and pronunciation cultivated by German dialogue, the more difficult senior courses are accessible to him. Upon completion of these, the student in the "graduate courses" can devote the greater part of the remaining three years to some special Germanic study.

If the candidate is preparing for a final examination, he must, of course, pursue some studies in associated departments, as in English, the Romance languages, comparative philology, history, history of culture, etc.

The aim set before Germanic students at the University of Chicago is not low. "Kaffeekränzchen," with obligato declamations from little books bound in red, teas at which writers on fashion are discussed, are lacking; neither are opportunities for small talk afforded to those with social inclinations. A wholesome, earnest effort is manifested thoroughly to learn, so as to be able to teach, the German language, its history, development, and relation to other languages, and German literature from the beginning to the present day.

How is this result obtained? By a faculty of six teachers, each of whom has studied in Germany and at the leading American universities. The German department of the university can boast that every member has passed his doctor's examination with honor and does not owe his position or promotion to favor.

Prof. Starr Willard Cutting is at the head of the department. He is assisted by Messrs. Hans M. Schmidt-Wartenberg, Camillo von Klenze, Paul Oskar Kern, Philip S. Allen, Hermann Benjamin Almstedt, and, during the summer quarter, by Richard Hochdörfer, professor in Wittenberg College and director of the German department there.

A department library of about 4,000 volumes is accessible to the students. It is an advantage which can not be too highly estimated that students have free access to the bookshelves and to all the works, and can thus do more than become familiar with their names in the catalogues, or with the contents of a few, after wasting time waiting at a librarian's desk.

The library is receiving constant additions. Even if not complete, all that is most important, and even more than this, has been acquired during the seven years that the university has been in existence. * * *

To refute any deduction from what has been said that the Department may be thought to be insufficiently equipped with works of reference and journals, I shall mention the periodicals and other serial collections which seem to be the more important. They are:

Zeitschrift für deutsche Philologie; *Zeitschrift für deutsches Alterthum*; *Literaturblatt für germanische und romanische Philologie*; *Herrig's Archiv für das Studium der neueren Sprachen*; *Schnorr's Archiv für Literaturgeschichte*; *Beiträge zur Geschichte der deutschen Sprache und Literatur*; *Quellen und Forschungen*; *Germania*; *Jahresberichte für neuere deutsche Literaturgeschichte*; *Jahresbericht der germanischen Philologie*; *Archiv für nordisk Filologi*; *Nordisk Tidskrift för Filologi*; *Americana Germanica*; *Journal of Germanic Philology*; *Deutsche Literaturzeitung*; *Literarisches Centralblatt*; *Horæ Belgicæ* (von Fallersleben); *Vierteljahrsschrift für deutsche Literatur*; *Euphoriion*; *Zeitschrift für vergleichende Literaturgeschichte und Renaissance-Literatur*; *Neues Jahrbuch für deutsche Sprache* (von der Hagen); *Weimarisches Jahrbuch für deutsche Sprache* (Hofmann und Schade); *Aretin's Beiträge*; *Deutsches Sprachwort* (Max Moltke); *Anzeiger für deutsche Vorzeit*; *Alemannia*; *Die deutschen Mundarten* (Frommann); *Jahrbuch für niederdeutsche Sprachforschung*; *Correspondenzblatt des Vereins für niederdeutsche Sprachforschung*; *Deutsche Rundschau*; *Zeitschrift des Allgemeinen deutschen Sprachvereins*; *Zeitschrift für deutsche Sprache* (Sanders); *Zeitschrift für den deutschen Unterricht*; *Neues philologisches Centralblatt*; *Deutsche Revue*; *Westermann's Monatshefte*; *Beilage zur Allgemeinen Zeitung*; *Magazin für Literatur*; *Allgemeine deutsche Biographie*; *Bibliothek der gesamten Nationalliteratur* (Quedlinburg und Leipzig); *Bibliothek des literarischen Vereins in Stuttgart*; *Deutsche Nationalliteratur* (Kürschner); *Bibliothek der ältesten deutschen Literaturdenkmäler* (Paderborn und Münster); *Denkmale des Mittelalters* (Hattmer); *Denkmäler deutscher Poesie* (Müllenhoff und Scherer); *Deutsche Dichtungen des Mittelalters* (Bartsch); *Deutsche Classiker des Mittelalters* (Pfeiffer); *Neudrucke deutscher Literaturwerke*; *Deutsche Literaturdenkmäler des achtzehnten Jahrhunderts* (Seuffert); *Bibliothek älterer Schriftwerke der deutschen Schweiz* (Bächtold und Vetter); *Elsässische Literaturdenkmäler* (Martin und Schmidt).

Besides these there are considerably over a hundred similar journals in other departments.

From teachers and helps accessible to students we pass to the courses.

The school year is divided into quarters; elementary courses are reviewed in each quarter: the higher courses are given on an average once or twice a year; seminary courses sometimes include several quarters, and are likewise repeated periodically during the three years' graduate course.

1. JUNIOR COLLEGE COURSES.

German grammar, exercises in translation and speaking (110 lessons in the course).

Continuation of this course—syntax, memorizing of an extensive vocabulary, written notes (55 lessons in the quarter).

Moderately difficult exercises in style and German composition (55 lessons in the quarter).

Studies in German prose—extracts from works on history, philosophy, and natural science.

Modern comedies combined with exercises in conversation (55 lessons in the quarter).

2. SENIOR COLLEGE COURSES.

Modern German lyrics and ballads; Schiller's *Wilhelm Tell*; *Deutsche Aufsätze und Stilübungen*—a course intended primarily for teachers, or students who purpose to become teachers. It consists of oral and written criticism of brief daily themes upon subjects suggested by the instructor. Discussions of German synonyms and of the peculiarities of everyday verb usage find practical application in the translations and composition work of the class.

Heine's prose and poetry; recent German drama. A discussion of recent tendencies in German literature, as manifested in representative dramas of Sudermann and Hauptmann.

Grillparzer; Lessing as dramatist; Goethe's period of classical sympathies; Goethe's life and works.

3. GRADUATE COURSES.

Lessing as critic. Seminar: Lenau. German life, literature, and plastic art from 1300 to 1550 A. D.; outline study of German literature; Gothic: Old High German; Old High German literature; Middle High German; the *Nibelungenlied*; Old Norse; Old Saxon. Seminar: Phonetical investigation. Introduction to Germanic philology.

After a brief survey of the aims of scientific language study and the history of German philology the main problems of general Teutonic phonology and morphology will be briefly discussed. Open to students that have had courses in Gothic and Old High German.

Seminary: Researches in the history of language and phonetics, making use of texts from the literature of the Reformation.

These were the courses for the school year 1899-1900. As before remarked, the higher courses are changed every year in a cycle of three years. Lectures which were not held this year are announced for the two following years. It would be taking owls to Athens if we should do more than mention that the completion of definite courses admits to higher courses. If a lower course falls in autumn and the higher in spring, the latter must be arranged for the following year.

We may add to this account that students of the German department are particularly advised to study old, early middle, and later middle English (in the fifteenth course) and Sanskrit (general introduction to the study of Indo-European comparative philology).

This university was among the first to promote popular education by the introduction of summer courses and university extension. A full account of the visit of the German ambassador, Dr. von Holleben, is given farther on. Among the graduates who have received the degree of doctor of philosophy as many as 6, up to the year 1899, selected a Germanistic theme for their thesis. An interest in the study of German has therefore been greatly encouraged. The total number of students in 1900 was 3,774.

NORTHWESTERN UNIVERSITY.

This university, founded by the Methodists in 1851, at Evanston, Ill., a small city 12 miles north of Chicago, on Lake Michigan, enjoys a large attendance (in 1900, 2,200 students of both sexes). According to the catalogue for 1899-1900, the German department has eleven courses for each of the two sessions. The teachers were: James T. Hatfield, professor of German language and literature; George O. Curme, professor of Germanic philology; Henry Cohn, associate professor of German.

The following courses were held during the first session: Elementary German, courses 1-4. (1) Lessing's *Minna von Barnhelm* and Emilia Galotti; Schiller's *Kabale und Liebe*; Goethe's *Hermann und Dorothea*; German composition. (2) Goethe's *Life and Works, 1749-1790*. (3) Goethe's *Life and Works, 1790-1832*. (4) Hymns and national songs. (5) Advanced group, subject to change. (6) Rapid reading of standard prose works. (7) Colloquial German. (8) Advanced German composition. (9) Modern German drama. (10) Gothic. (11) Old High German.

During the second session: (1) and (2) Similar to those of the first session. (3) Schiller's *Life and Works*. (4) The romantic movement and the Swabian school. (5) to (9) Similar to those of the first session. (10) Comparative grammar and Old Saxon. (11) Middle High German.

Courses (2), (7), and (8) should be included by all who intend to become teachers in secondary schools.

The German courses were attended by about 100 pupils of the preparatory school and 300 students.

The associations founded by Professor Cohn, the *Deutsche Gesellschaft* and the *Literatur Verein*, deserve a special mention. Whereas so important a university as Harvard has not yet introduced public German lectures to promote interest in German, they have been held in the *Literatur Verein* regularly since 1893. As they number over 40, we can not mention all, but quote only the following: Prof. Karl Knortz (Evansville): "National songs and popular traditions." Professor Hatfield: "The debt of young Americans to Francis Lieber." Wilhelm Vocke (Chicago): "The Boers;" "The German soldier in the American civil war;" "The relations between Germany and America." J. H. Dietz (Chicago): "Freiligrath and the poetry of the period of '48." L. Viereck (New York): "Fridtjof Nansen and the investigation of the north pole." Dr. A. Fischkin (Chicago): "The poetry of misery." William Jensen: "The Mennonites." Miss Margaret J. Mayr: "Johanna Ambrosius." Dr. G. A. Zimmermann: "Goethe and Napoleon." Sigmund Zeisler: "Hauptmann's *Versunkene Glocke*."

In addition, memorial celebrations for Lessing, Schiller, Goethe, Platen, and Hans Sachs have been held.

Besides these lectures, German theatricals and recitations play an important part. At the commencements of the German department a short German play is given, and German poems are recited interspersed with music. As all the educated Germans of Chicago support these agencies, there has never been a lack of assistants or an audience.

On March 21, 1900, Professor Cohn died suddenly. On February 13, 1901, Professor Hatfield wrote to the author concerning the changes occasioned thereby in the department:

Professor Cohn's death has been a heavy, almost irreparable, loss for us; nevertheless, the work is going on as usual, unchanged, two young men, Dr. Martin Schütze and Mr. Georg Edward, having taken his place as instructors. Dr. Schütze studied in Freiburg and Rostock, taught in Pennsylvania, and received his doctor's degree at the University of Pennsylvania. A noteworthy article by him on Hauptmann's *Die versunkene Glocke* was published in Volume III of *Americana Germanica*. Mr. Edward studied in Giessen, devoted himself to liter-

ary work, and has published a number of articles in German newspapers and periodicals. The attendance of our department has remained unchanged. We look back upon a healthy development and note, especially in recent years, the presence of maturer students. At the same time we are receiving increasing recognition in foreign countries, particularly Germany. The most important works that have been recently produced by our department are: Wesley's Translations of German Hymns and various Goethe Studies. A larger work on "The influence of the American Revolution upon German literature," by Miss Elfrieda Hochbaum, will appear in the next number of the *Americana Germanica*.

UNIVERSITY OF WISCONSIN.

Since the year 1893 Dr. Charles Kendall Adams, former professor of history at the University of Michigan, and from 1885 to 1893 the successor of Andrew D. White as president of Cornell, has been at the head of this university, founded in 1848. His labors have already been referred to. It may be inferred that under a man like him the German department has made ample progress. In how encouraging a manner this development has taken place may be understood by a glance at the plan of study for the second session of 1901, which comprises as many as thirty German courses. These are partly required courses (9) and partly elective (21).

Required courses are:

1. Grammar and prose readings.
2. Lessing's *Minna von Barnhelm*, German composition and prose readings.
3. Practice in speaking and writing German.
4. Schiller's *Wilhelm Tell*. Prose composition.
5. Schiller's *Maria Stuart*. Prose composition.
- 6 and 8. Dippold's German Science Reader.
7. Scientific Monographs.
9. Ratzel's *Deutschland*. Light reading and composition.

Elective courses are:

A. GERMAN LITERATURE.

10. Goethe's *Iphigenie* and *Tasso*.
11. Goethe's *Egmont*.
12. Dramatic reading. Ludwig Anzengruber and other modern dramatists.
13. Hauptmann's *Die versunkene Glocke*. } For students who have had three
14. German lyrics and ballads. } years of German.
15. Readings illustrating the history of German civilization.
16. German novels.
17. Goethe's *Dichtung und Wahrheit*.
18. Syntactical exercises. Compositions and themes.
19. Goethe's *Faust*. Second part.
20. Teachers' course. A critical study of the report of the committee on modern languages with lectures and reports on methods of teaching modern foreign languages.
21. General survey of the development of German language and literature.
22. The German romantic movement.
23. Studies in modern German literature. Hebbel, Ludwig, Keller, Fontane, Lillencron, Sudermann, Hauptmann, Richard Dehmel, and Juengstes Deutschland. Lectures, exercises in literary criticism, and reports on Adolf Bartels, *Die deutsche Dichtung der Gegenwart*.

B. GERMAN PHILOLOGY.

24. Introduction to Middle High German. Lectures and recitations. *Nibelungenlied*.
25. Advanced Middle High German. Hartmann von Aue's *Der arme Heinrich*, with lectures on the Court Epic.
26. Studies in etymology.
27. Germanic mythology. Klee's *Deutsche Mythologie*. Lectures and collateral reading.
28. Studies in the language and literature of the sixteenth century.
29. Philological seminary.
 - a. Middle High German division. Wolfram's *Parzival*.
 30. b. Old Saxon division. *Heliant*, ed. Behaghel.

To these may be added lectures held by Julius E. Olson, professor of the Scandinavian languages and literatures, in his own department, 6 courses in Modern and Old Norse, so that there are 36 courses in all, a number not exceeded in any other university, and justifying the large corps of 11 teachers.

The department of Scandinavian languages is mentioned in the catalogue as follows:

This department offers instruction in all of the Scandinavian languages (Norwegian, Danish, Swedish, and Old Norse). From one year's instruction in Modern Norse the student is expected to be able to read both Norwegian and Danish authors, as Norway and Denmark have practically the same literary language. Courses 1 and 2 are devoted principally to Norwegian authors, but additional instruction in Danish and Swedish literature is offered to students desiring to pursue these branches beyond the limits of the prescribed courses.

Since the death of Professor Rosenstengel, November 12, 1900, Dr. Ernst Karl Johann Heinrich Voss, assistant professor of German philology, has been at the head of the department. He has furnished the following information on its present status:

From the list of German lectures for the second session, 1901, you will see that two new teachers have been added, Dr. Roedder, former instructor at the State University of Michigan, and Mr. Lessing. The department is at present in charge of the following teachers. (Next year there will be a professor of German literature besides. The department was already divided during the lifetime of Professor Rosenstengel, who taught history of German literature while I conducted the lessons in philology.)

Prof. Dr. E. Voss, acting professor of German; Prof. Miss Susan Adelaide Sterling, M. L.; Mr. Frederick William Meisnest, B. L.; Mrs. Abbie Fiske Eaton, M. L.; Dr. Edwin C. Roedder, A. M.; Mr. Lessing, instructors; Miss Sabena Mildred Herfurth, M. L., assistant instructor; Miss Veerhusen, assistant instructor; Mr. Handschin, fellow; Mr. Eckelmann, graduate scholar in German philology.

For the last three years the citizens of Madison have offered a graduate scholarship of \$250 annually, and last year the Germans of Sheboygan founded a second graduate scholarship for three years that gives the holder \$300 a year. On January 1, 1899, the university received about \$3,500 from the German-Americans of Milwaukee for a Germanic seminary library, that has been collected with the greatest care and will soon be dedicated.

For the last three years the Pabst Theatrical Society, in Milwaukee, has presented a classic drama in Fuller's Opera House, under the auspices of the Germanistic Society of the university. This year Minna von Barnhelm was given on March 14.

During recent years valuable books have been presented to the German department by Dr. Balz, of Milwaukee; Julius Zehnter, Theodor Herfurth, and H. Schmedmann, of Madison; the late Professor Rosenstengel, and the correspondent. The well-known firm of Brockhaus, in Leipzig, which furnished the books for the German philological seminary library, made the generous offer of presenting the library with all of their numerous editions that could be made use of. The works given by this firm represent a money value of at least \$500.

We cherish the hope of making the German department here one of the leading in the States, and count upon the active support of the unusually strong German population.

When we consider that this university has only of late years developed from a college or high school to its present importance, this report must necessarily be regarded as most encouraging. Unfortunately there is no later report of the attendance at German courses than that furnished in 1898 to the German Teachers' Association, when the number of German students amounted to 560. With a total of 2,400 students, at least 600 to 700 should take German.

THE UNIVERSITY OF MINNESOTA.

At the Chicago Exposition the tastefully arranged educational work exhibited by the State of Minnesota excited deserved attention. The university, founded in 1863 in Minneapolis, numbered 3,225 students in 1900.

The teachers of German and Scandinavian are: John G. Moore, B. A., professor of German; Olaus J. Breda, professor of the Scandinavian languages and literatures; Matilda J. Wilkin, assistant professor of German; Charles M. Andrist, M. L., instructor in French and German; Carl Schlenker, B. A., instructor in German.

Courses are divided into—(a) German for undergraduates, 6 courses; (b) German for graduates, 4 courses; (c) Scandinavian languages for undergraduates, 3 courses; (d) Scandinavian languages for graduates, 1 course.

The German courses for undergraduates include "advanced subjects in literature and criticism," like Lessing's *Laocoon*. The four graduate courses last year were: (1) *Life and works of Luther*; (2) *Old High German*; (3) *seminary (Goethe's Faust, II)*; and (4) *teachers' seminary (historical German grammar; methods of modern language instruction)*. The course in *Old High German* was given by Dr. Frederick Klaeber, assistant professor of English.

For the scientific and literary course as much knowledge of German and French as can be acquired in two years is required. Candidates for the degree of doctor of philosophy must have a reading knowledge of German and French. The total attendance of the German courses was from 400 to 500.

UNIVERSITY OF CALIFORNIA.

The personnel of teachers at the State University of California in 1900 consisted of the following gentlemen: Albin Putzker, M. A., professor of the German language and literature; J. Henry Senger, Ph. D., associate professor of German; Frederick L. Wharff, Ph. B., instructor in German; Martin A. M. Centner, assistant in German; Henry E. G. Ongerth, graduate of the University of Vienna, reader.

The courses were divided into—(1) preliminary courses for freshmen and sophomores; (2) intermediate courses, primarily for sophomores and juniors; (3) advanced courses, primarily for juniors and seniors; (4) courses for seniors and graduates; (5) graduate courses.

The courses for beginners include an introduction to scientific German. In the intermediate courses the latter forms a chief subject of instruction, for which the works of Dubois-Reymond are made use of. Special reading is assigned to students in connection with the course, principally from Virchow and Holtzendorf's collection. In the advanced courses Goethe's and Lessing's works are explained, and *Middle High German*, *Old High German*, *Old Saxon*, and *Gothic* studied. In a special course of difficult prose, books like Bluntschli's *Doctrine of the Modern State* and Von Sybel's *Rise of Europe against Napoleon I* are discussed, with oral interpretation in German. In the courses for seniors and graduates separate sections of the history of German literature receive special attention.

Last year the following courses were announced as graduate courses: (a) *Historical German grammar*, a study of the development of *Modern High German*; (b) *Goethe's Faust*; (c) *special study*.

The catalogue says of course (c): "The instructors in German hold themselves ready to assist and advise competent graduates who may propose plans of special study which meet the approval of the department."

Professor Senger writes, concerning the attendance: "During the last session 509 students took part in these lectures and exercises; this number has been increased during the present session."

The proposed introduction of obligatory German admission examinations is likely to increase the attendance of German courses to a great extent. The principle already obtains: Credit toward a degree is not given for less than two years' work in German. The total attendance of the university is given at 3,216.

THE LELAND STANFORD JUNIOR UNIVERSITY.

Although this university—formally opened to students October 1, 1891—can not look back upon an existence of ten years, it has gained a high reputation under the excellent management of President David Starr Jordan, and according to latest reports numbers an attendance of about 1,400. In view of the fact that this institution has been obliged to compete with the large State University, twenty years older and numbering an attendance of 3,000, this success is the more brilliant. In no small measure is it due to the excellent work of the German department, directed for nearly nine years by Prof. Julius Goebel, who has four assistants.

The courses are divided into the preparatory studies of the elementary and second years, third-year German, and the graduate courses. The annual register of last year contains the following remarks on the thirteen courses for undergraduates:

The aim of the elementary classes in this department is to give the student a thorough knowledge of German grammar and to enable him to acquire facility in reading German. The more advanced classes take up the study of the poets and writers of the classical period, and it is intended to offer by the reading and interpretation of these authors an equivalent for the study of the ancient languages to those not taking Latin or Greek in their university course.

A course of German syntax affords opportunity for composition and exercises in style to those who take the course of advanced German composition.

Last year the nine graduate courses were as follows:

Middle High German; Nibelungenlied; Old High German and Old Saxon; Heliland; Old Norse; Edda; Gothic; comparative German grammar; German seminary ("young Germany" and its influence on German literature, life, and politics of the nineteenth century).

The register says of the aim of the graduate courses:

The graduate courses in German, for which a thorough linguistic preparation is required, are intended especially for students who will make the teaching of German their later profession. Careful attention is given to the linguistic as well as to the literary training of the student, aiming at a comprehensive insight into the historical growth of the Germanic languages and literatures. The scientific methods of original and critical research are taught and practiced in the seminary. Such students as have given satisfactory proof of their ability as independent investigators will be admitted to the degree of Ph. D., after having presented a thesis containing a contribution to science and having fulfilled the other requirements prescribed by the university.

Professor Goebel wrote to the author of this article concerning the condition of affairs in the spring of 1900:

The German department of our university is one of the largest. Of about 1,200 students more than one-half study the German language and literature, most of them, of course, to make use of the language as a scientific instrument to aid in prosecuting their other studies, although a large number are educating themselves to be German teachers. Of these I require a thorough philologic education—Gothic, Norse, Old and Middle High German—as well as a thorough knowledge of German literature.

To give you an idea of the number of students that are making a serious study of German philology and literature, I may mention that during this session I explained Goethe's poems to 70 students, Gudrun to 20, Heliland to 10, and Ulfilas to 18. Twenty advanced students, namely, those designing to take the register or doctors' examination, followed the exercises of the Germanistic seminary. I have four assistants.¹

The reason that I am able to conduct so profound German studies is that, six years ago, I succeeded in obtaining an excellent private library for the university, the only one in America, of Rudolf Hillebrand, my teacher and friend.

¹ In the eighth register (1898-99) only the following are mentioned: James Owen Griffin, professor of German; Karl G. Rendtorff, Ph. D., assistant professor of German; Alfred Francis William Schmidt, instructor in German. The name of the fourth assistant could not be ascertained.

At the close of a speech delivered at the end of December, 1897, before the California Teachers' Association, President Jordan remarked: "German stands at all the gates of culture and exacts its toll from all who would enter." The development of Stanford University confirms his words. The youngest institutions are modern in their organization and therefore cultivate German with extraordinary zeal.

THE COLUMBIAN UNIVERSITY.

The capital possesses three schools which deserve the name of universities in their graduate departments. These three universities appeal, however, to different constituencies and to different circles of students.

The Columbian University is, according to its charter and foundation, a Protestant institution in the widest sense of the word. Georgetown University was founded as a college in 1788, under the auspices of the Society of Jesus, through the efforts of the first archbishop of Baltimore, John Carroll. In 1815 it was chartered by Congress as a university, and in 1833 authorized by the Holy See to confer the highest theological and philosophical degrees. The Catholic University, founded but twelve years ago, is the papal university of America par excellence, and was intended as a graduate school only. It stands under the chancellorship of Cardinal Gibbons of Baltimore.

As the two great Catholic universities scarcely afford any space to Germanic scholarship, they do not call for further consideration in this connection. The Columbian University, on the other hand, has in the course of the last ten years allotted to the study of the Germanic language and literature a place and value equal to those of any other branch of scholarship. While German is still elective in the college, it is obligatory in the Corcoran Scientific School, and no degree can be obtained there or in the graduate school without a satisfactory knowledge of that language.

Among the professors of the Columbian University there are the most distinguished scholars and scientists of the country, who, while standing at the head of the scientific Government bureaus, and of the Supreme Court, Smithsonian Institution, etc., also devote their energies to the various departments of the university.

The headship of the department of Germanic language and literature rests with Prof. Hermann Schoenfeld, Ph. D., assisted by the instructors Reed Paige Clark, A. M., and C. S. Hyde, A. M. The courses in the college and the Corcoran Scientific School are adapted to the various needs of academic and technical or scientific students, and are as follows:

THE COLUMBIAN COLLEGE.

GERMANIC LANGUAGE AND LITERATURE.

Instruction in this department has as its primary object a thorough knowledge of the grammar and familiarity with the literature and history, with such practice in conversation as shall serve as a stimulus in the furtherance of this object.

German grammar is studied during the first three years of the course, with its principles illustrated from the class readings and written exercises.

1. The deeper aspects of grammar; accurate training in phonetics and translation into German: conversation; readings from the best German proseists and poets; Whitney's German Grammar; selected texts. Three hours.

2. Advanced course in German syntax; extensive translation into German; selected advanced prose; classical reading and literature; elements of German history. Three hours.

3. Study of the principal difficulties of the language; idioms, synonyms; German essays; literature of the second German *Blüteperiode*; German history and science; extensive reading from the classics. Three hours.

4. Elements of philology; survey of German literature and its relation to the other Germanic peoples; history of the old and the new German Empire; further

classical reading in Goethe's *Faust*; introduction into the *Nibelungen Lied* and the *Gudrun Saga*; introduction to Gothic. Three hours.

CORCORAN SCIENTIFIC SCHOOL.

GERMAN.

1. Accurate training in elementary grammar; pronunciation and translation from English into German; exercise in conversation; readings from the easier German prosaists and poets. Two hours.

2. More extended course in German syntax and principal difficulties of the language, idioms, etc.; extensive translations into German; selected stories; Gore's *Science Reader*, fourth edition, alternating with Brandt and Day's *Science Reading*; one or two classics. Two hours.

3. Study of idioms, synonyms, and Sander's *Hauptschwierigkeiten der deutschen Sprache*; special preparation for scientific professional work; Helmholtz on Goethe's work in natural history (edition of Seidensticker); Humboldt's *Kosmos*; critical studies of German classics; lectures on German literature. Two hours.

4. A special course in German training for advanced students in the historic and economic departments; Schoenfeld's *German Historical Prose*, Ranke (edited by H. Schoenfeld), and the standard works of German historians and economists will be read. Two hours.

5. An elective course in German conversation will be instituted from the start and conducted with systematic gradation for students of all grades.

The work in the two undergraduate departments being done by the professor in charge only in the most advanced classes, ample time is left him for a careful preparation of graduate students in German, who are trained especially in literature and history.

GRADUATE SCHOOL.

GERMAN LITERATURE.

1. The Literature of the Sixteenth Century. Braune's *Neudrucke Deutscher Literaturwerke*. Humanism and Reformation, with special reference to Italian and French influences. Historical basis after Voigt, Janssen, Ranke, Burckhart, L. Geiger.

2. Literary awakening in Germany in the time of Frederick the Great; critical study of the literary centers—Leipzig, Zurich, Berlin. The Storm and Stress Period and the youthful works of Schiller and Goethe; critical investigation of Klopstock's Odes; the first three cantos of *Messias*.

3. History of the Second Classical Period. Lessing's *Laokoon*, *Dramaturgie*, *Literaturbriefe*: A study of German Critique. Detailed investigation into Schiller's and Goethe's works. Literary Germany at the death of Goethe (1832).

These alternate with courses concerning the older phases of the language.

GERMAN HISTORY.

1. The emerging of the Germanic, Romanic, and Slavic races in European history. The migration of peoples. The evolution of European States to the rise of the Hapsburg House. (Selections from the historical sources will be read and interpreted.)

2. The Holy Roman Empire from Rudolph of Hapsburg to the death of Maximilian I (1519), with special reference to *Kulturgeschichte*, and the first attempts at church reform.

3. History of the Renaissance and Reformation.

Special courses may be arranged, after consultation, with graduate students.

However, no more than three of the courses designated are given in any one semester. The need of an instructor in Germanic philology is urgently felt, and such an appointment will be made as soon as the means of the department will permit.

The incalculable prestige which German thought, culture, and civilization enjoy in this university becomes manifest when it is considered that in the department of philosophy, conducted by the excellent Hegel scholars, Dr. Sterrett and Dr.

Harris, six courses out of ten deal directly with German philosophy pure and proper, besides two, philosophy of history and history of philosophy, which ipso facto include the wide range of German thought.

Mr. Schoenfeld's lectures and writings¹ on the traces and influences of foreign, especially Slavonic, elements upon German history and literature have cultivated a field heretofore untouched in American universities.

UNIVERSITY OF INDIANA.

"The Indiana Seminary," founded in 1820, was raised to a "college" in 1828, and by resolution passed by the State legislature to a "university" in 1838. It is situated in Bloomington. The institution has been lifted to a high level during the last ten years. A certain knowledge of the German language and literature (Lessing, Schiller, and Goethe) is required for admission. The number of pupils increased from 144 in the year 1884, and 321 in 1890, to 1,050 in 1899; 220 profited by the thirteen courses of the German department, conducted by the following teachers: Prof. Gustaf E. Karsten, director; Dr. Carl Osthaus, professor extraordinary; Dr. Eugene Leser, Roy H. Perring, and Philipp Seiberth. A course in introduction to German dialects, often lacking elsewhere, is held for advanced students. The active interest manifested by the educated Germans of Indiana toward the work of the German department is remarkable. At the close of the year 1896, upon invitation of Professor Karsten, nine German citizens of Indianapolis contributed so generously to the foundation fund of the Journal of Germanic Philology that the able editor could begin serious work. By their support of the journal these contributors deserve the greatest credit, worthy of sincere appreciation, for the advancement of the German language.

WESTERN RESERVE UNIVERSITY.

Located at Cleveland, Ohio, this university was founded in 1826 as Western Reserve College. The undergraduate department is now known as Adelbert College. The graduate school was established in 1892. The degrees of master of arts and doctor of philosophy are conferred. All courses open to graduate students are considered graduate courses. The College for Women is a department of the university, and women are admitted to the graduate school on the same terms as men.

Under President Charles F. Thwing the number of students of German has greatly increased. Prof. R. W. Deering, who graduated at Leipzig in 1839, is at the head of the German department. Prof. Charles Harris, who in 1833 likewise graduated at Leipzig as doctor of philosophy, is one of the teachers, besides Instructor Edward Meyer, who graduated as doctor of philosophy at Heidelberg, 1896.

The following graduate courses were announced for 1899:

Deering: Gothic, Old German Literature, Old German Life, Old High German, Lessing and the classic German drama, Faust.

Harris: The Romantic School, History of German Literature, Middle High German, Modern German Grammar.

Meyer: Oldest German Poetry, German Religious Epics, The National Epic, Modern German Social Drama, The Court Epic.

The attendance at the German courses was rather large in 1898 (120 out of 700) and has since increased.

¹ One of these, Higher Education in Russian, Austrian, and Prussian Poland, appeared in the Report of the Commissioner of Education, Washington, 1896.

VANDERBILT UNIVERSITY.

In 1872 representatives of the Methodist Episcopal Church South, from Tennessee, Alabama, Louisiana, Mississippi, and Arkansas, undertook to establish a university, and it was in response to this movement that Cornelius Vanderbilt, of New York, gave \$500,000 to found such an institution. This happened in 1873, and before his death he had raised his donation to \$1,000,000, which was increased about \$500,000 by his son William and grandson Cornelius. The income of the university amounts to over \$100,000. The courses are open to women as well as men, and there is an average attendance of 700, under a faculty of 80 instructors.

The German department is under the direction of Dr. A. R. Hohlfeld, Professor of German Languages and Literatures, who graduated at Leipzig in 1888 and has since been teaching modern languages at the university.

In the sixth annual edition (1893-99) of the "Graduate Courses"¹ the following graduate courses are given:

Storm and Stress.

The Romantic School and Young Germany.

Gothic.

Old Saxon.

Historical German Grammar and Literature.

Essays in German.

WESLEYAN UNIVERSITY.

The Wesleyan University, located at Middletown, Conn., is the oldest of the Methodist Episcopal Church colleges. It was located in 1829, in consequence of an offer made by the city of Middletown to a joint committee of the New York and New England conferences. The offer consisted of two large stone buildings, together with a subscription of \$18,000 toward an endowment fund of \$40,000. With this insufficient endowment it is not astonishing that this institution, although opened in the year 1831, has seldom had a larger attendance than that of last year, 267 male and 60 female students, instructed by 28 teachers. There are only two teachers in the German department, Prof. A. B. Faust, of whom a biographical sketch follows, and Mr. Ford, who teaches the elementary branches. There were only eight courses in all, two of which were for advanced students, and treated German literature in general and the history of the German novel in particular. If, in spite of the unfavorable general conditions, as many as 175 students pursue the German courses, the result, that could be attained but by few other institutions, must be considered extraordinary. At all events, Professor Faust may regard this result with great pride.

BROWN UNIVERSITY.

In consequence of insufficient endowment, the old Brown University, founded in Providence, R. I., 1764, has been in rather an unfavorable position in contrast with the numerous finely equipped colleges. Conditions, however, may have changed, as John D. Rockefeller presented \$250,000 to the institution last year, under the condition that it should be added to a contribution short of a million from another quarter. This condition was fulfilled, and so Mr. Rockefeller has endowed the institution with the said amount. A favorable result is expected. The German seminary library contains many publications, including periodicals and philological works, also special collections in Middle High German and New High German literature.

Alonzo Williams, professor of German languages and literatures, directs the German department. The lectures for graduates treat: Faust, Parts I and II,

¹ Chicago. The University of Chicago Press, 1893, p. 38.

History of German Literature, Middle High German in three different courses (Court Epics, Minnesingers), Gothic, Old High German, German Mythology, German Philology, and Old Norse.

According to the latest reports, the university numbers 75 teachers and 886 students. How many attended the German courses could not be definitely ascertained.

NEW YORK UNIVERSITY.

New York University was founded in the year 1831, and is progressing to an encouraging degree, despite the competition of Columbia University. While the latter controls a sum of about \$17,000,000, and an annual income of \$920,000, the former possesses about \$3,600,000 and a corresponding income. Thanks to the munificence of different citizens of New York, the finances are constantly improving, and so the institution is able to do progressively more and better work. Until his death, Mr. Oswald Ottendorfer made great sacrifices to equip the German library properly, which contains about 9,000 volumes and has a good assortment of collected works and periodicals. Mr. Herman Ridder offers an annual prize to the student of the German department who renders the best work on a subject selected from German literature. Last year the theme was: "On the influence of German literature on the *Hainbund* of Göttingen."

German instruction includes elementary instruction for beginners as well as graduate courses in language, literature, and purely philological branches. Besides Professor McLouth, who is at the head of the department, Prof. Abram S. Isaacs and Instructor Ernst Mannhardt teach German. About 10 per cent of the 1,600 students in all attend the German courses. Last year several lectures on interesting subjects from the history of German literature treated specially of Grillparzer, Lenau, the German novel, the German ballad, and the origin and development of the German national song. A favorable horoscope may be defined for the further development of the German department of this university.

The summer school for Germanic languages is a new arrangement which has received special mention elsewhere. The freshman entrance examination prizes deserve a mention. A prize of \$100 is given to the freshman passing the best supplementary examination in Section A; also given to the freshman passing the best supplementary examination in Sections B or C. Further details are given in the university catalogue.

HAMILTON COLLEGE.

Hamilton College, at Clinton, N. Y., is one of the oldest educational institutions in the State of New York, having been opened in 1812; the only older ones are Columbia University, opened in 1754 as King's College, and Union College in Schenectady, opened in 1795.

In the last fifty years this college has had an almost uniform attendance of 155 to 160 students, at present instructed by 18 teachers. Proper attention is given to German and a special prize (the Munson prize) is offered to the students; the winner receives a considerable sum of money. German is a required study for three terms beginning with the third term of the freshman year for classical students, continuing as an elective to the end of the college course, and culminating in the Munson prize examination. The prospectus defines the aim of German instruction to be "familiarity with German literature, German life, and German thought," and, at the same time, "a philological and practical knowledge of the German language." That this is not a mere question of words, is substantiated by the fact that one of the most excellent educators in the country, Dr. Herman Carl Georg Brandt, has been in charge of the German studies for the past eighteen years. Dr. Brandt likewise conducts seminary courses for the students. In the year 1900, Lessing was studied. The third term of the senior year included

Middle High and Sixteenth Century German. For admission, a two years' course in French and no German, or a year's course in French and German, or, finally, a two years' course in German, is required. The attendance at the German courses is 50 to 60 for each school year.

WASHINGTON UNIVERSITY.

In the year 1900, Dr. Otto Heller wrote to the author of this work the following letter of information on the conditions of this university, founded in St. Louis in 1853, and now attended by 1,939 students:

Seven years ago I was called to the chair of German languages and literatures, founded by the munificence of Mr. Adolphus Busch. My first duty was to raise my study to the same rank as the other disciplinary branches, and I succeeded in a short time. The elective system obtains at this university. Despite the fact that only a small number of students, namely, the freshmen who did not study German in the preparatory school and studied French in the first year of college, are required to take German, so many of their own will attend the German courses that more than half of the total attendance are on my list. This active interest is due, in the first place, to the favorable location of the university. Our students, for the most part, are of German-American extraction. In my opinion St. Louis is, for this reason alone, most suitable for a school of German. * * * Every year I hold a series of public lectures on German literature, partly in the German and partly in the English language. During the last few years, the attendance has been so encouraging that the university hall has proved too small. The receipts are added in total to the library fund.

For the present I am giving instruction in the college and the school of engineering alone, but I hope to receive an assistant in the near future. At the intermediary schools connected with the university (Smith Academy, Manual Training School, Mary Institute) there are five teachers, men and women.

Of the five courses which I am conducting this year, three are intended for Anglo-Americans. In one (sketch of the history of German literature from the earliest times to the present) I unite advanced Anglo-Americans, mostly in the two highest years, and German-Americans who are just beginning the study of Middle High German. The majority of these are in the first year. The language of instruction is German. Finally, in this year, I read, exclusively to German-Americans, Goethe's metrical works. A full term of three lessons a week is given to Faust. When my time and students' preparation permit a philological course is read, and Gothic, Old High German, Middle High German, and history of language are studied.

THE UNIVERSITY OF NEBRASKA.

According to the census of 1890, the State of Nebraska numbered a few over 1,000,000 inhabitants, of whom 72,618 were born in Germany and 46,321 in Scandinavia. The Germanic element, therefore, can hardly be called strong. Nevertheless, the German department of the State University, located at Lincoln, has attained a rather large attendance in the school year 1899-1900.

The beginners' class numbered.....	250
The second year	175
The lectures on the classics	74
The normal course.....	14
The other higher courses, as Old High German, Scandinavian, etc.....	41
Total.....	554

Forty-two per cent of the total attendance—1,411 men and women—therefore, took German courses.

In the last school year twenty German courses were given. In the lower classes language lessons were held and a few easy books, among them Frau Sorge, by Sudermann, were read. The study of literature is begun after students have acquired sufficient knowledge to understand the ethical and æsthetic character of the classics. As a rule, polite literature is taken up in the third and fourth years. A two hours' lecture on "The German language, its development and construc-

tion," was designed especially for Germans who desired to make a study of their mother tongue. The lectures on the classic writers—Lessing, Schiller, and Goethe—were particularly well attended. Great interest was likewise manifested in the literature of the nineteenth century. Besides, Sudermann, Hauptmann, Max Kretzer, Bertha von Suttner, Fontane, Wildenbruch, Scheffel, etc., were eagerly studied. Some devoted themselves to purely philological branches.

The personnel of teachers consisted of the following: Laurence Fessler, A. M., professor of the Germanic languages; Hans Christian Peterson, Ph. D., instructor in the Germanic languages; Amanda Henrietta Heppner, A. B., instructor in German.

WITTENBERG COLLEGE.

Wittenberg College, which was opened at Springfield, Ohio, in 1845, has ten male and two female teachers for 160 male and 94 female students. An elementary knowledge of German grammar and the ability to construe simple German sentences and read easy prose at sight are required for admission. German instruction in the "college" is conducted by Prof. R. Hochdörfer and Instructor Wilson, the latter of whom has entire charge of the German in the "academy." Heine's *Harzreise*, for instance, is one of the masterpieces of German literature read regularly. The well-known work by Prof. Kuno Francke, *Social Forces in German Literature*, serves for private study. A two hours' lecture on German civilization was introduced last winter by Professor Hochdörfer for senior and graduate students.

The fifty-third annual catalogue says of the purpose of the eleven German courses:

The chief aim of the freshman and sophomore courses—for which a thorough and ready knowledge of the formal elements of grammar is an essential prerequisite—is to develop idiomatic expression and vocabulary by making the students acquainted with model products of German style and literature, and by oral and written composition work. The latter furnishes the primary test for a student's fitness to enter upon the advanced junior and senior electives, which aim at a study of literary masterpieces as embodiments of national ideas, and as contributions to ruling tendencies of thought. In judging the student's ultimate standing considerable stress is laid upon idiomatic utterance and stylistic ability.

Some of the advanced courses are held in the German language.

UNIVERSITY OF MISSOURI.

The State University of Missouri, located at Columbia, Boone County, began its lectures April 4, 1841. It is coeducational and at present numbers 1,200 students, male and female. The German department is quite important, and is in charge of Prof. B. F. Hoffmann. The attendance is about 200. Professor Hoffmann holds the following graduate courses: Middle and Old High German, German literature of the eighteenth and nineteenth centuries, life and works of Schiller, Goethe, and Lessing.

INSTITUTIONS FOR WOMEN.

Among the institutions designed for women exclusively, Radcliffe College, connected with Harvard, whose teachers are likewise employed there, and Barnard College, which holds a similar position with relation to Columbia University, rank preeminent, since they profit by all the advantages of these prominent universities. Others deserving of mention are Vassar College, Bryn Mawr College, the Woman's College of Baltimore, and Wellesley College.

VASSAR COLLEGE, POUGHKEEPSIE, N. Y.

German instruction was introduced here at the opening of the college in the year 1836. The first German professorship was held by Miss Caecilie Kapp, the sister of

Frederick Kapp. The progress of the German department is manifested by the fact that, whereas in the year 1889-1890, only 75 students took German, this number has since, under the excellent management of Professor (Miss) Herholz, risen until during the current year it amounts to 250, out of a total attendance of 600. In consequence, two assistants, Misses Reinecke and Bartelmann, have been appointed. Both were born in Germany. The library contains 30,000 volumes, of which about 5,000 are German. Every year \$200 to \$300 are set aside for the purchase of German books. German enjoys such favor that it is the language for conversation during recreation. The German Society, founded in 1900, presents German flags. In February, 1901, Minna von Barnhelm was studied, and is to be given at commencement. On November 10, 1900, Schiller's birthday was celebrated with memorial addresses, recitations, and songs.

The German elementary courses are required for those who enter without any knowledge of German. Besides these there are fifteen elective courses, including language, literature, and the history of literature. The following is the programme for the two courses devoted to scientific German:

Course I.—Scientific German, Gore; Science Reader or Brand and Day's Scientific German; Cohn on Bacteria; Müller, Electrical Machines. First semester (2).

Course J.—A. Lang, Characteristics of the Methods of Research of Lamarck and Darwin; Von Baer, Which is the Right Understanding of Animate Nature; Kölliker, The Present Position of Morphological Studies. Second semester (2).

Great attention is given by the seniors to Faust studies and the "novel course," which is devoted to the more prominent authors of the nineteenth century. In February of the current year Director Conried delivered an interesting lecture in German on the German stage.

BRYN MAWR COLLEGE.

Last year this college, which was opened at Bryn Mawr, Pa., in 1885, had 24 male and 17 female teachers for its 322 students. Besides its director, Prof. Hermann Collitz, Dr. Albert Haas, professor extraordinary, and Miss Rose Chamberlin teach in the German department. A certain knowledge of German grammar and the ability to translate at sight from German into English are conditions for admission. Those students who pass an admission examination in Greek are exempted from this in the beginning, but they are required to pass the German examination if they desire to receive the degree of bachelor of arts. To afford the necessary advantage, elementary courses in German have been introduced; upon completion of these, students are admitted to the course in German conversation, which is as popular here as among the students of Vassar College. Those who pass the admission examination take a two years' course devoted to an introduction into the history of German literature (in the first year, ancient literature to Klopstock; in the second year, classic and modern literature), and a thorough study of several masterpieces of German literature, and to perfecting their practical knowledge of German. Those who have been successful in this course and pass the baccalaureate examination are admitted to the graduate courses; these require three years and claim to attain the same end as the philosophic course at German universities. Accordingly, those who have studied in this division three years, and whose theses have been accepted as having scientific value, receive the degree of doctor of philosophy, if they pass the final written and oral examination. A condition is that graduates must spend at least two years at Bryn Mawr. A fellowship in Germanic and Teutonic philology, amounting to \$525, and several scholarships have been offered.

The German department was organized by Professor Collitz in 1886 and has since been successfully continued. The earnestness with which philological studies are pursued is best shown by the fact that several students of Bryn Mawr have

distinguished themselves by publications of a technical nature. The following works have proceeded from the seminary for Germanic philology in Bryn Mawr: Caroline T. Stewart: *The Nominative Singular of Weak Substantives in Old High German*, 1887 (published in *Bezenberger's Contributions to the Knowledge of Indo-Germanic languages*, vol. 23). Dorothy W. Lyon: *The hymn "Christe, qui lux es et dies," and its German, Dutch, and English Translations*, 1898 (published in the nineteenth volume of the *American Journal of Philology*).

A characteristic of Bryn Mawr College is the so called "senior orals," namely, examinations "to test the students' ability to read French and German at sight," which are held during the course of the last year before the conferring of degrees, consequently, a kind of graduate examination in modern languages in addition to the admission examination. Not only those who make a special study of modern languages, but all students who desire to receive the A. B. degree, must pass this examination.

THE WOMAN'S COLLEGE OF BALTIMORE.

This college was founded by the Methodist Episcopal Church in the year 1885, and was opened in September, 1888.

The department of German language and literature is directed by Dr. Hans Froelicher, who is assisted by his wife, Dr. Frances Froelicher. It seeks to bring the student into close touch with the character and genius of the German nation by means of exact study of its language and historical and critical study of its literature. The work is planned with a view to having courses of an elementary and introductory character precede courses calling for individual and independent intellectual effort on the part of the student. The historical succession of epochs and of writers in all the courses (except the beginners' course) forms the natural outline of the work. Social conditions and events in political history are considered wherever they bear on the subject of study. The influence of foreign literature is traced, and incidentally affords glimpses into the comparative study of literatures. Throughout the course, however, the study of historical matters is subordinated to that of literature as literature. Courses of lectures are given for the purpose of supplementing the critical study of authors and literary units, the literary and philosophic import of which forms the main object of the work. A certain elementary knowledge of German and the understanding of 500 pages of German literature are required for the A. B. degree.

Besides the beginners' course, the following five courses for advanced students were held last year:

I. The course in postclassical literature of the nineteenth century, in which Sealsfield was likewise discussed.

II. The course in Middle and Old High German, connected with the history of German literature from the earliest times to the Middle Ages.

III. The course in the German drama in general and the critical study of the classical drama.

IV. The course in epic and lyric poetry.

V. A special course in Schiller and Goethe, giving special attention to Faust.

An excellent opportunity is thus afforded to learn and appreciate German literature. No one can complete the above courses without understanding to a certain degree the thought and feeling of the most prominent German authors.

WELLESLEY COLLEGE.

Wellesley College, located at Wellesley, Mass., was opened in 1875 for the purpose of furnishing to young women advantages and facilities for a liberal education. The college confers the degrees of master of arts and bachelor of arts. The work of graduate students is under the direction of a committee appointed from the faculty of the college.

The following courses were announced for 1899:

I. Carla Wenkebach, professor of German language and literature. German mythology and *Wölsungensaga*; theory of the drama; history of German literature; Lessing as dramatist and critic; Goethe's *Faust*, I and II; German seminary.

II. Margarethe Müller, associate professor of German. Goethe's life and works; German prose; historical and other novels; Middle High German; Schiller as philosopher and writer on æsthetics.

III. Louise C. M. Habermeyer, instructor in German. Translation from German into English (advanced); nineteenth century authors.

IV. Elsbeth Müller, instructor in German. Grammar and composition (advanced).

There are at present 69 teachers for the 700 students. The attendance of the German courses was a fair percentage of the total.

II. PUBLIC SECONDARY SCHOOLS.

Our proper business is improvement.—*Daniel Webster*

It is beyond all dispute that the condition of American intermediate education is chaotic and unsatisfactory. As yet no results have been realized from the report of the committee of ten. Whereas the existing educational system is beyond compare and progresses uninterruptedly from year to year in the higher institutions of learning, the schools designed partly to prepare their students for college, and partly as "people's colleges," to give a general education to all classes, suffer for the want of a uniform system to which they might properly conform.

Independent of parochial institutions and certain other private schools, which will receive special mention, the following kinds of schools prepare for college:

I. True preparatory institutes, including the well-known "academies" of the Northeast, that have corps of excellent teachers.

II. Preparatory schools of colleges, instituted to supply the want of good preparatory institutes. They are under the direction of the teachers of the respective colleges and drill their pupils so as to become excellent freshmen.

III. City high schools similar to the formerly popular Latin schools of Germany, and designed for those who have completed the grammar-school course.

High schools are of comparatively recent date, and increased in number to any great extent only during the second half of the nineteenth century. Until now they have prospered best where, as in Michigan, they are under State supervision and stand in a positive relation with the State university. As before stated, since 1870 a high-school diploma admits to the university without further examination. A similar arrangement has been introduced in Minnesota, and other States seem to be following the same lines. Since German has become an integral part of instruction and competes successfully with Greek, the administration of a system of intermediate schools must hinge on a promotion of German studies.

The complaint that America lacks gymnasia, in which students in Germany and Austria are prepared for the university, is the dominant vein of thought in all addresses and articles by American educators who have had the opportunity of studying these schools where they exist. Hon. J. D. Philbrick, of Boston, declared in the department of superintendence of the National Educational Association, January 30, 1874:

There is no public high school in America, with the possible exception of the New York College, where the course of education is equal, either in extent or thoroughness, to that of a gymnasium or a *Realschule* in Vienna. The teaching staff in these institutions is composed of professors who are more nearly on a par, in respect to learning and culture, with the professors in American colleges than with the teachers of our high schools. In respect to knowledge of the science and art of education they are quite superior to the American college professors. They have not only received a university education, but they are also required to pass through a course of pedagogical training in the university seminaries established for the purpose.

The courses of study in the gymnasium and the Realschule alike extend over the period of eight years, the pupils entering at 10 or 11 years of age and graduating at 18 or 19.

In respect to equipment, including apparatus and libraries, they are vastly superior to the American high schools. In one of the youngest of these institutions, which is not yet provided with a building for its use, the apparatus, none of which is for ostentation, but all for use, has cost 26,000 gulden, a sum equivalent to more than the same number of dollars spent here. Several of the buildings which have been recently erected for the schools are quite superior to any high-school edifice which has as yet been erected in this country. The tuition is not gratuitous, but it is very cheap, not exceeding \$15 a year for such people as have the means to pay, while meritorious pupils who are not able to pay this sum are provided for by charity funds and in other ways. But, after all, you may ask, are not these schools, with such comprehensive courses of study and such accomplished professors, small establishments? Far from it. Some of the largest have nearly 30 professors each and six or seven hundred pupils, the aggregate number of their professors being about 375 and the total number of their pupils being no less than 5,500. This number of boys and young men is at least equal to the whole number of boys receiving secondary education in the public high schools of the 15 largest cities in America. Besides these public secondary schools there are others which are denominational or private. The Protestants have a very large and excellent school for both sexes, although of a somewhat lower grade.

Such is the superiority of Vienna over American cities in one of the principal departments of public instruction.¹

The attempts made in America to imitate German gymnasia have all failed, as they were destined to do, since the country needs American institutions and can not make use of the European. One would suppose that the many colleges, all of which can hardly develop into universities, would, where sufficient intermediate schools do not exist, provide preparatory classes which would supply the lack of secondary schools in a comparatively easy way.

In an interesting lecture on "Overwork in public schools,"² delivered some time since before an audience of teachers, President William De Witt Hyde, of Bowdoin College, explained one of the chief reasons why high schools can not attain the same results as the German gymnasia and Realschulen. He said:

Investigations in the high schools of Boston, Providence, and Fitchburg show that the average time spent in study and recitation during the five days of the forty weeks of a school year, is seven hours and a quarter, of which two hours and a quarter are spent outside the school. This is much less than the eight and five-tenths hours for scholars from 14 to 16, and the nine and three-tenths hours for scholars from 17 to 19, which is the limit in the German gymnasium.

A very simple arithmetical computation shows that pupils in American high schools work $7\frac{1}{4} \times 200 = 1,450$ hours, while those of German gymnasia work $9 \times 240 = 2,160$ hours on the average, consequently nearly 50 per cent more during a school year. It is not surprising, therefore, that preparation for college is here so often insufficient, and that modern language instruction is treated in a step-motherly fashion for the mere want of time.

Another weighty reason why German instruction in particular prospers no better in public high schools was explained by Professor Ferren, of Allegheny High School, in a very interesting address delivered at the first meeting of the Association of the Teachers of German in Pennsylvania.³

The study of the German language, he said, resembles a long bridge, which must be "crossed, not merely entered upon," if the end is to be reached. And he proceeds:

But why is it that so many able pupils derive so little benefit from the study of German in our high schools. We teachers must take part of the blame upon our-

¹Address by Hon. J. D. Philbrick, of Boston, on "Systems of public instruction in European and American cities compared," page 63.

²Paper read July 8, 1886, at the fifty-seventh annual meeting of the American Institute of Instruction.

³The meeting was held April 9, 1893. The full text of the address was published in Volume II, No. 2, of the *Americana Germanica*.

selves, and may hold our superiors in office and the public school system accountable for the rest. Too many of us are so utterly devoid of an "intellectual conscience" that we consent to teach most anything under the sun, whether we are qualified or not. Some of us make ourselves believe that we know German because we have a number of stock phrases at our command and have read a few hundred pages of text. The truth of the matter is that many of us are totally unfit to lead others across the bridge, because we have never crossed it ourselves. Hence, one of the first duties devolving upon this association is to set a higher standard for high-school teachers of German. Let us, like good Germans, live up to this principle, even though it should mean annihilation to us. *Patere legem quam ipse tulisti*. We must insist that no one shall be permitted to teach German in a high school who does not know his subject thoroughly. But this is not all—scholarship alone will not suffice—pedagogical ability is equally indispensable, and it is a fatal mistake for scholars to regard it as a minor matter or as something that will take care of itself. Pedagogical problems are so numerous and intricate in a high school that it will require the lion's share of a teacher's time to solve them. Whoever shirks this part of his work—be it to enjoy more leisure or to prepare for some other vocation—is a traitor to his cause. Such persons in particular are guilty of that most heinous pedagogical crime of hurrying over the elements at a breakneck speed. The great curse of language study in this country is the deplorable ignorance of the elements.

Too many of our language courses are topheavy; we need more good teachers at the base; otherwise the entire structure will collapse someday. I never could understand why so many trained men who might become useful and prominent in high-school work—and have a clear conscience besides—prefer to eke out a miserable existence in some college or university. We need a dictator to tell some people that are overplaced where they belong. The high school is not taken seriously enough. To obtain the best results in the high school we must have teachers trained in their special departments; teachers loyal to their task, and willing to devote their lives to the building up of our public school system. * * *

But there are still further reasons why the high school does not accomplish more in German. Although these do not reflect so directly upon us teachers, yet an organized effort on our part will do much to remove them. Among others there is the mistaken notion that a high-school course in German should attempt no more than to satisfy the entrance requirements of an average college. No one who is at heart a public school man can uphold such a view in the face of all statistics on the subject. If the German courses in our public schools shall not be a farce, then time enough must be given to them so that definite and lasting results can be obtained by the end of the high-school course. This I think can be accomplished, provided German runs through the high-school course as an elective for four years with 5 recitations per week, making a total of 800 periods. I do not maintain that even at the end of this time the pupils will have reached the desired goal, but they will certainly be so near to it that all who wish to reach it independently of a teacher can do so without too great a sacrifice of time and energy. If, on the other hand, we confine ourselves to short courses of two years or less, expecting the colleges to supplement these, then most of the public money spent on German instruction will be wasted, since only a small minority will derive any benefit at all from it. By attempting to do more in German than our colleges require for entrance we are not opposing these institutions, but are merely doing our duty by that large majority that will never go to college. In proof of this I quote the following from Commissioner Harris's latest report on secondary schools in the United States:

Public high schools of Pennsylvania.

	Males.	Females.
Total enrollment.....per cent.....	37.5	62.5
Percentage of total male and female enrollment preparing for college.....per cent.....	13	5.2
Pupils taking German.....	1,498	2,559

* * * Several months ago I sent out about 600 letters of inquiry concerning the study of German in our public high schools. Thus I learned that fully 100 reputable high schools distributed over 74 cities had four years of German. In Pennsylvania there are but 5 of these, Philadelphia being conspicuous for its

absence. I give a list of the cities, but omit the names of the individual high schools:

Akron, Ohio.	Council Bluffs, Iowa.	Houston, Tex.	Saginaw, W. S., Mich.
Albany, N. Y.	Covington, Ky.	Indianapolis, Ind.	Sacramento, Cal.
Allegheny, Pa.	Crownpoint, Ind.	Jacksonville, Ill.	South Bend, Ind.
Altoona, Pa.	Davenport, Iowa.	Kansas City, Mo.	South Salem, Ohio.
Appleton, Wis.	Dayton, Ohio.	La Crosse, Wis.	Springfield, Ill.
Austin, Tex.	Denver, Colo.	Lafayette, Ind.	Springfield, Ohio.
Baltimore, Md.	Detroit, Mich.	Lima, Ohio.	St. Cloud, Minn.
Belleville, Ill.	Duluth, Minn.	Milwaukee, Wis.	St. Joseph, Mo.
Binghamton, N. Y.	Elgin, Ill.	Montclair, N. J.	St. Louis, Mo.
Boston, Mass.	Elwood, Ind.	Newark, N. J.	St. Paul, Minn.
Brooklyn, N. Y.	Erie, Pa.	New York, N. Y.	Titusville, Pa.
Canton, Ohio.	Evansville, Ind.	Omaha, Nebr.	Toledo, Ohio.
Chicago, Ill.	Fort Wayne, Ind.	Oshkosh, Wis.	Trenton, N. J.
Chillicothe, Ohio.	Gloucester, Mass.	Oswego, N. Y.	Washington, D. C.
Cincinnati, Ohio.	Grand Island, Nebr.	Peoria, Ill.	Wausau, Wis.
Cleveland, Ohio.	Grand Rapids, Mich.	Pueblo, Colo.	Worcester, Mass.
Colorado Springs, Colo.	Helena, Mont. (3 $\frac{1}{2}$).	Quincy, Ill.	Youngstown, Ohio.
Columbus, Ohio.	Hamilton, Ohio.	Richmond, Ind.	
Corby, Pa.	Hammond, Ind.	Saginaw, E. S., Mich.	

The lecturer advocated at the close of his paper:

1. To introduce German into as many high schools as possible.
2. To insist on four years of German in the high schools wherever circumstances will permit.
3. To increase the efficiency of the work in our own and other departments by limiting the number of subjects assigned to each teacher.
4. To set a higher standard for high-school teachers of German by requiring them to pursue special post-graduate courses.
5. To give German its proper place as an elective in the high-school curriculum.
6. To encourage the Latin-German group, since this will raise the standard of our department, and will enable more pupils to enter college.
7. To found a national association for teachers of German.

As far as the secondary schools of New York, in particular, are concerned, the College of the City of New York has for the past few years been undergoing a process of change into a high-grade college. It may therefore be a mistake to class this institution among the intermediate schools. Encouraging attention is given to German instruction, directed by Professor Werner.

In the school year 1901, two sessions, the attendance at German instruction was:

- I. Classical course (German elective only in the last year), 12 seniors.
- II. Scientific course and mechanical course: Subfreshmen, 100; freshmen, 190; sophomores, 165; juniors, 122; hence, a total of about 600 pupils.

Dr. Montesper writes concerning the conditions in the high schools of New York City, in existence about five years:

I fear that I can reply but imperfectly to your inquiry on the present status of the development of German instruction in the high schools of New York. I have exact information only on the conditions of the De Witt Clinton High School, where I am engaged. The conditions at the Cooper High School are about the same in general. Very little German, however, is taught at the high school for girls (Wadleigh). * * * The full German course with us continues four years, with four periods a week. Besides, we have a three years' course which begins in the second year and has five periods a week, and another three years' course with four periods the first and two periods each the second and third years. The last mentioned is intended for those pupils who study both classic languages, and is, therefore, that division of the high school which corresponds to the German gymnasium, while the first-mentioned courses correspond to the realschule and realgymnasium. The first year of all courses is devoted chiefly to giving an excellent foundation in grammar; later, reading, translation, composition, and, to some extent, conversation form the subject matter of instruction. In the third and fourth years pupils read works like Minna von Barnhelm, Tell, and Hermann und Dorothea.

What is to be gathered from this interesting letter, to wit, the lack of persons fully informed on the present state of affairs, is explained by the well-known maxim of Goethe, particularly applicable to secondary schools:

Nothing is constant but change.

May the Proteus of American intermediate schools soon assume the definite shape specially desirable for the interests of providing well-prepared freshmen for universities and the elevation of German instruction.

III. PUBLIC PRIMARY SCHOOLS.

Ohio's former metropolis, Cincinnati, in the year 1840, in pursuance of the school law of 1839 for the State of Ohio, introduced elementary schools with two languages, and was the first city to take this step. Ohio was followed by Indiana and Wisconsin. In most other States the choice was left open to city communities to what extent a foreign language should be introduced or discontinued in their public schools. The consequence is that in St. Louis, for instance, where German instruction flourished to such an extraordinary degree during the brilliant period of Dr. Harris's superintendence, it has been altogether suspended, whereas in New York and Chicago the attempts to discontinue it have been made futile only by the combined opposition of American intelligence and the national spirit of German-Americans.

Director Dapprich¹ has thus reported on the present state of affairs:

Whereas the two languages have an equal rank in the schools of Cincinnati, in other cities English is placed far above German. In Baltimore the English-German schools enroll more than 8,000 pupils under city control, and sufficient attention is given to German; there is no attendant expense, as the class teachers conduct German instruction and no extra outlay is necessary. Conditions are the same in Belleville, Ill., where more than half of the public-school teachers are prepared to teach German. The same may be said of many other cities. This arrangement is the only right one for the rational study of German and its continuance as a branch in public schools. The effort should be made to extend this system to all city schools. We on this side of the ocean find it incomprehensible that teachers in Germany are not required to learn at least one foreign modern language, for the time is not far distant when no one will be considered educated unless he can speak and write two languages fluently.

The tendency toward the realization of this ideal is very strong among American teachers. An epoch in this direction was marked by the report of the committee of ten to the National Educational Association in 1894. Prof. Charles H. Grandgent, of Boston, Mass., chairman of the section for modern languages, reported:

Wherever thoroughly competent teachers can be secured we are of the opinion that there should be introduced into the grammar schools an elective course in German or French, open to all pupils who have arrived at the fourth year from the end. It is supposed that the average boy or girl will reach this stage at the age of 10. We make the above recommendation not with a view to separating at such an early period the scholars who are likely to enter a high school or college from those who are to receive only elementary instruction, but in the firm belief that the educational efforts of modern-language study will be of immense benefit to all who are able to pursue it under proper guidance. It will train their memory and develop their sense of accuracy; it will quicken and strengthen their reasoning powers by offering them at every step problems that must be immediately solved by the correct applications of the results of their own observation; it will help them to understand the structure of the English sentence and the real meaning of English words; it will broaden their minds by revealing to them modes of thought and expression different from those to which they have been accustomed. The study of Latin appears, it is true, to present the same advantages, but living languages seem to us better adapted to grammar-school work, both on account of the greater ease with which they can be taught and learned and because of their closer relation to the interests and ideas of to-day.

The following statement of the extent of German instruction in American cities, furnished by the committee of the German Teachers' Association, may be appended to this general investigation.²

¹ Dr. Müller, *German Schools and German Instruction in Foreign Countries*, pp. 346 and 347.

² The tables, which are taken from pages 43 to 45 of the pamphlet *The Present Position of German Instruction in the Schools of the United States*, contain several errors that have been corrected here as far as possible. It is astonishing that the percentage of pupils studying German in cities where German is not taught in the public elementary schools is not much below that of cities where public German instruction receives "no special encouragement." In such cases parents must prefer private schools which afford ample opportunity for learning German.

I. *Cities in which German receives special attention.*

City.	Population.	Per cent German.	Pupils.			Study German.			
			In private schools.	In public schools.	Total number.	In private schools.	In public schools.	Total.	Per cent.
New Braunfels, Tex.....	2,000	99	120	240	360	120	240	360	100
Tell City, Ind.....	3,600	95	123	500	623	120	500	620	96
Belleville, Ill.....	18,000	70	1,055	2,779	3,834	960	2,926	2,986	71
New Ulm, Minn.....	4,800	90	340	684	1,024	330	575	905	90
Carlstadt, N. J.....	2,600	90	122	517	639	122	486	608	95
Eric, Pa.....	50,000	87	3,000	7,651	10,651	1,985	4,890	6,875	63
Milwaukee, Wis.....	250,000	66	19,093	32,027	51,120	10,525	21,190	31,715	62
Cincinnati, Ohio.....	330,000	40	16,793	42,789	59,582	10,700	17,287	28,047	50
Cleveland, Ohio.....	340,000	40	15,000	50,454	65,454	8,041	17,643	25,684	40
Evansville, Ind.....	60,000	37	3,000	7,483	10,483	1,865	2,480	3,845	35
Hamilton, Ohio.....	25,000	30	1,250	3,207	4,517	450	1,017	1,467	32
Columbus, Ohio.....	120,000	20	2,529	17,369	20,539	1,580	2,980	5,560	32
Dayton, Ohio.....	80,000	30	3,800	10,982	14,782	1,320	2,203	3,523	32
Saginaw, Mich.....	18,000	30	4,400	4,200	4,600	1,350	1,130	1,380	35
Baltimore, Md.....	550,000	23	17,400	75,610	93,010	2,250	2,450	15,700	16
Indianapolis, Ind.....	150,000	19	2,241	27,662	29,903	1,861	4,537	5,398	18

II.—*Cities in which German receives no special encouragement.*

City.	Population.	Per cent German.	Pupils.			Study German.			
			In private schools.	In public schools.	Total number.	In private schools.	In public schools.	Total.	Per cent.
New York, N. Y.....	1,800,000	38	50,000	261,226	311,226	18,240	60,000	78,240	25
Buffalo, N. Y.....	350,000	40	19,082	52,157	71,239	5,030	7,030	12,160	17
Hoboken, N. J.....	54,000	56	1,500	2,119	3,619	870	980	1,850	20
Sheboygan, Wis.....	22,000	55	1,307	3,445	4,752	1,870	744	2,614	55
Dayenport, Iowa.....	31,000	46	1,200	2,483	6,685	340	3,400	3,740	56
Chicago, Ill.....	1,600,000	37	91,041	213,825	304,866	25,240	31,708	57,108	19
Denver, Colo.....	150,000	13	1,450	21,280	22,730	530	2,861	3,391	15
Lancaster, Pa.....	38,000	23	500	5,745	6,245	980	580	1,560	25
Akron, Ohio.....	35,000	23	1,500	5,810	7,310	750	75	825	11
Toledo, Ohio.....	115,000	23	4,500	16,724	21,224	1,932	1,932	3,800	18
La Crosse, Wis.....	30,000	35	935	5,120	6,055	898	590	1,433	25
Houston, Tex.....	45,000	15	500	4,218	5,018	350	816	1,166	23

III.—*Cities in which German is not taught in the public elementary schools.*

City.	Population.	Per cent German.	Pupils.			Study German.			
			In private schools.	In public schools.	Total number.	In private schools.	In public high schools.	Total.	Per cent.
St. Louis, Mo.....	600,000	37	25,000	73,529	98,529	16,850	148	16,998	17
Detroit, Mich.....	275,000	46	13,671	31,756	48,427	7,180	250	7,430	15
Newark, N. J.....	215,000	36	9,915	30,575	40,490	5,180	500	5,680	14
Louisville, Ky.....	200,000	32	8,000	24,855	32,855	4,530	150	4,680	14
St. Paul, Minn.....	150,000	32	7,000	22,829	29,829	2,183	413	2,628	9
Allentown, Pa.....	110,000	32	5,630	18,969	23,969	1,500	130	1,630	11
Brooklyn, N. Y.....	1,100,000	26	40,000	146,429	186,429	7,560	960	8,110	5
Peoria, Ill.....	55,000	29	1,400	7,962	9,362	1,020	150	1,170	12
Dubuque, Iowa.....	42,000	23	2,400	5,301	7,701	1,650	175	2,025	30
Quincy, Ill.....	34,000	38	2,500	4,617	7,117	1,640	80	1,720	24
Rochester, N. Y.....	160,000	32	2,827	22,518	28,345	1,180	448	2,628	9
Pittsburg, Pa.....	275,000	27	2,900	30,783	53,783	7,128	160	7,288	13

NEW YORK CITY.

The following instructive facts on the introduction of German instruction in the city of New York were given at a German mass meeting held March 18, 1875, in Cooper Institute:¹

Recognizing the merits of the study of modern languages and their advantage for practical life, the school commissioner of the city of New York, in 1854, introduced an optional one-year course in the highest grade of the grammar schools. In the year 1870, chiefly because of the increasing importance of the German element in civil society and commercial interests, German was introduced as a regular branch of public instruction in all the eight grades of grammar schools wherever, in the judgment of the school trustees of the respective wards, there was sufficient demand for it. In consequence, till the close of the year 1873, German was taught as a regular branch to 19,395 pupils in 464 classes, in contrast with the limited optional course in French in the two highest grades, which was pursued by 1,609 pupils in 50 classes. The result was that in the fall of 1874 1,180 of the 1,200 students at the Female Normal College studied German, while only 20 took the French course.

On December 16, 1874, Commissioner Brown presented a report from the committee on course of study and schoolbooks to the board of education of the city of New York, as follows:

* * * Pupils attending German private schools have in large numbers left those schools to connect themselves with the public schools, and in this way not only has our system of public instruction been made more popular, but it has become more effective as a means of Americanizing the citizens of foreign birth and their children, who constitute so large a part of our population, by bringing them in immediate and daily contact with the children of Anglo-American birth, and under such educational and moral influence which tends to make them a thoroughly homogeneous part of our nation. The more effective this department of instruction is made the more successful will our system be in this respect and the more nearly shall we approach to that desirable consummation of bringing under the influence of our common schools the children of all classes of our people as well as of every nationality and creed. The importance of this consideration will be obvious in view of the fact that at least 11,000 German pupils are in daily attendance at the Catholic parochial, Lutheran, and German private schools.

The report proceeds to state the result of investigations in 12 of the larger and a few of the smaller cities. Among other things, it says:

In St. Louis the number of pupils of the public grammar schools studying German was, in 1871-72, 10,246 out of a total number of 29,138, or 35.2 per cent; in 1872-73 the number rose to 12,055 out of a total number of 31,009, or 38.9 per cent. The increase was chiefly in the number of Anglo-American pupils, who in 1871-72 numbered 1,353 and in the following year 3,180. Hence the board of education gradually introduced German into a large number of schools, and, for children of German parentage, into all the grades of the schools, from the lowest grade of the primary department up to the highest. Owing to the increased demands of Anglo-American parents, it was in 1871 introduced into the lower classes for all pupils.

The report then refers to conditions in Ohio, already mentioned, and of which a fuller account will be given, and concludes with Kentucky:

In Louisville the total number of pupils of public schools was, in 1872-73, 9,367; the number in German classes, 6,547, against 6,216 in 1871-72 and 5,713 in 1870-71. It is taught in the schools of all grades. The study is very popular, and, as in St. Louis, Cleveland, and Cincinnati, there is no opposition to it.

¹ Compare:

I. The German Language in the Public Schools. Addresses delivered at the mass meeting in Cooper Institute, New York, March 18, 1875.

II. The German Language as a Regular Branch of Public Instruction.

The reports of the superintendents and boards of education of the cities in which instruction in German has been for some time a part of the regular course of studies unanimously recognize the importance of this study. The president of the board of education of Louisville, in his last annual report, remarks: "As to the utility of the study of German in a community like our own, or in any community, there can be but one opinion."

From Commissioner Brown's report we can understand that his successor, Herring, who, in unison with Commissioner Baker, desired to abolish the "ornamental branches," of which German was one, encountered violent opposition. The protest meeting of March 18, 1875, was called to order by Mr. M. Ellinger. The chief speakers were Clark Bell, who spoke in English; Ex-Governor Ed. Salomon; Prof. Felix Adler, and Carl Gaepf. Letters of approval were sent by Bayard Taylor and Andrew D. White. The communication of the former is given in his biographical sketch. The latter wrote:

I need hardly state that I fully agree with you in keeping German as a regular study in our public schools. Years ago I expressed myself in favor of the motion, and time has only strengthened my view. I could give reasons for my opinion, but I shall refrain from doing so and mention but one fact. If every year hundreds of our best young men find it to their interests, at great expense of money, trouble, and time, to travel in Germany in order to learn the German language, it would be a ruthless waste of what we possess if we should allow this language to die out among the thousands who have its first elements and could acquire, for the interests of commerce and national education, a thorough knowledge of it by some continued exercise in our schools.

The resolutions adopted unanimously at the meeting were:

Since, according to the opinion of pedagogical authorities, instruction in a foreign language given simultaneously with that in the native tongue is the most valuable means to develop the mind of the young and the native language can be best learned by comparison with another;

Since the German language possesses all the qualities necessary for this purpose, a fact recognized in the report of the superintendents of the public schools of this city, as well as by the school authorities in other cities where German has been introduced into the public schools;

Since German is the language spoken by a large percentage of the population of the United States and of this city, on account of which direct practical advantages accrue from its introduction as a regular branch of study in public schools;

Since, as experience proves, German instruction in public schools draws a large number of children of German-American parents that would otherwise receive their education in private or parochial schools, whereby the difficulty of identifying the future generation of German extraction with our relations and institutions and educating a people of harmonious national sentiments and American patriotism is sensibly increased;

Since a former school board, with a proper appreciation of these facts, amended the by-laws so that German shall be recognized as a regular branch wherever public opinion so demands:

Be it resolved, That the citizens of this city, assembled without regard to party or other distinctions, learn with astonishment and regret that certain members of the present school board are endeavoring to change the course of study in our public schools by excluding instruction in the German language;

Be it resolved, That we, as citizens and taxpayers, most emphatically protest against these measures designed to exclude and curtail German instruction in public schools;

Be it resolved, That we fully indorse the report of last year's committee on studies, submitted to the school board, and are convinced that the adoption of the regulations therein recommended will prove an amelioration of the educational method tested by practical experience;

Be it resolved, That we consider every effort, under pretext of economy, to insure the development of our public schools, in that not only language instruction but other branches that exert a refining influence on youthful minds are excluded, as ill advised and unworthy of the genius of our times and the country and city in which we live;

Be it resolved, That as the institutions of our country are based upon a thorough and liberal education of all citizens, our public schools, to fulfill their purpose,

must afford instruction that will insure a thorough and equal education to children of the poor and the rich, of the native born and immigrants alike;

Be it resolved, That a copy of these resolutions, as expressive of the opinion of this assembly, be presented to the president of the school board by a committee appointed by the president.

We regret not to be able to give the excellent addresses delivered on this occasion. The effect of the speeches and resolutions was that the attempts to abolish German instruction were futile. On the contrary, upon motion of Commissioner Klamroth, it was decided to appoint an assistant superintendent whose special duty was to be the supervision of modern language instruction. Prof. Alexander J. Schem was appointed to this position, and has filled it most successfully.

Since then German instruction in the public schools of New York has attained a position which it is hardly likely ever to relinquish. The above-mentioned proportion—25 per cent—of pupils studying German seems to be far too small, especially when we take into consideration that, at present, only 491,203 of the total number of 733,416 children of school age are registered in public schools, and about 40,000 between 6 and 8 years of age grow up without any schooling whatever.

In the "first annual report of the city superintendent of schools to the board of education for the year ending July 31, 1899," Superintendent William H. Maxwell remarks (p. 119) on German instruction:

The German language is taught for all who care to study it. The result is that children are subjected to an amount of pressure in the Manhattan schools that is practically unknown in the other boroughs. The remedy is not to take shop work and German out of the schools, but to extend the schedule time to eight years, and at the same time to make provision by which bright children who can accomplish the work in less time may be permitted to do so.

The extension of German instruction is particularly necessary in Brooklyn, where only 5 per cent of the pupils study German, though at least one-quarter of the population is of German extraction.

CLEVELAND.

Though written twenty-five years ago, the able article on the development of German instruction in Cleveland, published by Max Horwitz in the *Deutsche Rundschau* (Vol. IV, pp. 249-252), has lost none of its worth. A glance at the tables given shows that Cleveland is one of the cities in which German instruction receives special attention.

The author writes:

It would be going too deep into the subject to give the exact data as to how German instruction was introduced in each city that has introduced it. Cleveland, which deservedly boasts of being the first city in the United States in this respect, may serve as an example.

German instruction is, to a certain extent, obligatory in Cleveland. A new school law passed by the legislature of Ohio May 1, 1873, reads:

"It shall be the duty of school commissioners to see that the German language is taught in all the public schools of the State where it is requested bona fide by seventy-five citizens, residents of the district in question, who represent not fewer than forty pupils, and the pupils want to learn German and English at the same time; provided that nothing herein contained shall be so understood as to prevent said commissioners from having German or other languages taught in the said schools, and provided that all branches of study which are taught in the public schools shall be taught in the English language."

Divested of its technical form of expression this law contains, besides a restriction in favor of English as the language of instruction, the regulation that commissioners may introduce German instruction whenever they see fit to do so, but must introduce it whenever the relatives of forty children in one district so request.

In pursuance of this law the school commissioner of Cleveland resolved that all the pupils in elementary classes must study German if at least eighty request it. The class is separated into two divisions, and is conducted by an English and a German teacher, who instruct alternately on the same day. Of the twenty-two

periods a week, eleven are given to English and eleven to German. The following table is taken from the order of study:

Subject.	English.		German.	
	Hrs.	Mins.	Hrs.	Mins.
Arithmetic.....	3	00		
Object lessons.....	2	00	2	30
Reading.....	2	30	2	30
Orthography.....	2	30	2	30
Writing.....	1	00	1	00
Singing.....			2	30
	11	00	11	00

While arithmetic is taught only in the English language, which is most proper for obvious practical reasons, and is expressly required by the State law in all classes, even the highest to which the above order of time applies, singing is taught only in German. As much as Americans may disagree with them on other subjects they consider music the special invincible right of Germans. It may be mentioned here as a curious occurrence that on the occasion of the last great German-American Sängerfest held in Cleveland in June, 1874, 1,500 children, representing, besides German, the Irish, Scandinavian, Italian, French, and negro elements, sang *Die Wacht am Rhein* with a very distinct pronunciation from beginning to end in German.

Of a total public-school attendance of 10,332 during the year 1873 3,572 pupils studied German. Of these 2,435 were children of German, 1,137 children of English parentage. The success thus attained is encouraging to Germans. The superintendent of German instruction, L. R. Klemm, appointed by the city, says:¹

"Of the 244 pupils of the A grammar classes that were examined to enter the high school 135 had studied German one, two, or three years; 123 of these 135—a little over 91 per cent—passed. Of the other 109 who had not studied German only 85—not quite 78 per cent—passed. Although the success of this entire examination depended upon the results of the examinations in arithmetic and English grammar, the pupils who took German carried off the prize from those whose ambition did not rise above a 'common English education,' even though they had more time to give to the studies specified."

And that is not all. Germans are not satisfied with demanding the opportunity for their children to learn German. They show Americans why their children likewise should have a share in German instruction. In the words of a zealous champion in Cleveland, that carry a greater weight since he speaks in an official capacity, many a prejudice is thereby removed that under other circumstances would have disturbed the friendly relations between the two nations. It is not enough that Germans should learn English. They do it without reluctance, although they clearly realize that it is not absolutely necessary for them to do so in large cities, as they can live in peace and harmony without it. Newspapers printed in their native tongue inform them of all that they need to know in politics and social life. They find enough German shopkeepers from whom they can make their purchases, and in social intercourse they need not mix against their will with persons that speak a language foreign to them; and still they learn English simply because they easily adapt themselves to the customs of others and are not so foolish as to dream of forming a state within a state. It is perfectly natural that they not only assimilate, but endeavor to impart. They think that this Republic is a crucible in which all the nationalities of the earth are represented, and since they are one of the three predominant components of the mixture they desire not only to increase the quantity, but, what is of more account, to exert an influence on the quality. They think that they possess attributes capable in fusing the mass of giving the new mixture a greater value; to that end it must give them pleasure that their English-speaking fellow-citizens are learning German.

CHICAGO.²

Upon motion of Lorence Brentano, a member of the school board at the time, German instruction was introduced in Chicago in 1865, by way of experiment, in

¹ Thirty-seventh Annual Report of the Commissioner of Education; Cleveland, 1874.

² According to the article of Dr. G. A. Zimmermann, superintendent of modern languages, in the *Pedagogical Monthly*, Volume I, No. 1, pp. 46 and 47.

the Washington school. Madame Pauline M. Reed, a highly educated woman, was the first German teacher. Upon her transfer to the high schools, in 1866, she was succeeded by Miss Caroline McFee. At that time 115 pupils studied German. The experiment did not fall through, and the school board declared it to be "a perfect success." In view of this circumstance, it was resolved that in future, in all districts where the parents of at least 150 pupils desired that their children should learn German, German instruction should be introduced. Consequently it was at once introduced into four schools—the Moseley, the Franklin, the Newberry, and the Wells. In the following years seven other schools were added to the list. At the close of the school year 1870-71 4,297 pupils, 1,411 in secondary and 2,886 in primary grades, studied German.

The great fire that transformed the flourishing city of Chicago into a mass of smoking ruins naturally affected German instruction unfavorably. After Chicago had recovered from the blow the school board resolved, in the year 1873, to appoint a superintendent of German instruction. Miss Regina Shauer was selected. At the same time the system of dividing German classes into definite grades was inaugurated; previously the teachers had acted according to their individual judgment.

When, in July, 1877, upon motion of the well-known attorney, Mr. W. Vocke, Dr. G. A. Zimmermann was placed at the head of German instruction, 1,912 pupils in 18 schools were studying German under 16 teachers. Interest in German was at that time dormant among the people at large. After great effort on his part, Dr. Zimmermann succeeded in rousing it. He made various changes in method, discarded a grammar of 400 pages and replaced it with a practical primer. The consequence was a decided change for the better. In the year 1880 German was taught in 12 additional schools and three high schools. The number of teachers had risen to 28 and the number of pupils to 3,931. Four years later 10,696 pupils, in 43 schools, were being instructed in German by 73 teachers. When, in the year 1885, German instruction was again introduced into the third and fourth grades, the number of pupils rose to 29,440, that of teachers to 143.

Through the annexation of different suburbs in the year 1890, German was introduced into 26 additional schools; 207 teachers were required to instruct the 34,801 pupils, and Dr. Zimmermann received an able assistant in Miss M. I. Purer. German instruction gained the height of its vogue in the year 1892-93; 44,270 pupils and 242 teachers worked under the direction of Dr. Zimmermann. Then came a sudden change. In consequence of financial embarrassment, the school board was forced to curtail expenses, and German instruction was restricted to the higher grades with a resulting diminution of 100 teachers and 20,000 pupils. However, all the teachers received positions as English teachers.

Since then the number of teachers and pupils has again steadily increased. According to last year's report 40,003 pupils were registered for German instruction. Of these 15,020 were of German and 12,195 of Anglo-American parentage; the parents of 12,788 were of other nationalities. Instruction was given by 210 teachers. In the high schools 2,481 pupils studied German, 1,310 French, and 12 Spanish.

For some time it seemed as though the encouragement given by this report was not to be sustained. A motion was made to abolish German instruction on account of lack of funds, and this proposition was supported by even the Times-Herald. But in pursuance of the decided attitude of the German press and the different German associations the retrogressive measure was not carried out. At present there are 42,000 pupils under 215 teachers in elementary schools, and in high schools 3,000 pupils under 27 teachers. These figures were never reached before, and including pupils of private schools are almost equal to the number of pupils studying German in the borough of Manhattan.

The following report is interesting from the very fact that its representation of the condition of affairs is no different from that of the others given. The author, Karl Knortz, superintendent of German, published the report in his recent pamphlet on German Nationality in the United States (Hamburg, 1898). In it he says:

In many of the numerous cities and villages of the East and West settled by Germans German is a branch of study in the public schools; as children are left free to choose for themselves, it depends chiefly upon the popularity of the teacher and his methods whether they take up the study or not. In some States of the Union, as in Ohio, Wisconsin, and Indiana, German instruction, under certain conditions, is regulated by law. It is deeply to be regretted that comparatively so few German-American children profit by this advantage, and that their parents attach so little importance to the preservation of their native language. I shall cite but one example: My place of residence, Evansville, has about 60,000 inhabitants, of whom 30,000 are said to be of German extraction. The public schools are attended by 7,000 pupils; as German-Americans usually have more children than Anglo-Americans, it would be supposed that at least 4,000 children would study German in the public schools; as a matter of fact, however, the number is only 2,500, and 900 of these are of English parentage. Nor is the proportion more encouraging in other cities. In view of the circumstance that of all German born pupils of public schools only 11 per cent speak German to their parents at home, the sad fact long since recognized that the German nationality of America can only be preserved by constant immigration from the fatherland is confirmed anew. Only where thoroughly educated, energetic, and discreet teachers, appreciative of the cultural value of the German language, are in charge of German instruction in public schools its condition is prosperous and its result encouraging. Where this is not the case the number of pupils studying German rapidly decreases.

IV. NORMAL SCHOOLS.

The teacher who does not feel himself or herself an apostle with an important human mission, but looks upon the teaching profession as a mere means of making a living, had better seek some other occupation—*Thomas Davidson*.

The various agencies for training teachers in the United States are enumerated by Hinsdale as follows:¹ Normal schools and colleges, teachers' training classes, teachers' institutes, summer schools, university extension lectures, teachers' reading circles, chairs of education in colleges and universities, and teachers' colleges.

Despite these manifold opportunities for a normal education it is unfortunately still the case that (on the authority of Boone) out of every four teachers only one on an average is systematically trained for his profession. Max Horwitz² presents this side of the teacher question, and especially the deficiency in number of German teachers, in the following graphic statement:

The most important question of the hour is the teacher question. Where are we to get teachers? There is an extraordinary deficiency of proper teachers. First of all, male teachers are displaced and even excluded by women. However much Germans in America are opposed to the instruction of girls' and boys' classes exclusively by women, and however much the German members of the school boards are of the same opinion, nothing remains for them to do but to adapt themselves to circumstances. Although they make the effort of gaining concessions in their behalf, they can not venture to attack a fundamental principle of the American educational system, which consists in giving teachers' positions, with the exception of the position of principal, to women. America is the country of championship for the rights of women. To their efforts and to the actual fear which Americans feel for women, and try in vain to conceal under the cover of esteem, is to be ascribed the fact that no effort has been made to give teachers' positions to men. Such an attempt would provoke an immediate siege of the ses-

¹ Monographs on Education in the United States, No. 8, page 1.

² In the article quoted above from the *deutsche Rundschau*, Volume IV, pages 255 and 256.

sion hall by hundreds of women, who would not depart until their "holy rights" had been guaranteed.

Independent of that fact, not enough male teachers could be found in America to replace the women. It does not occur to an American to study until his twentieth year in order to obtain a position that pays \$600 a year, with the prospect of slow increase. He decides to "run his chances," and tries his luck elsewhere. Germans, therefore, are required to adapt themselves to these conditions. If they desire to have German introduced in public schools, they must accept the compromise of female teachers. The city of Milwaukee is the only exception in all America. Whereas all positions in all schools are held by female teachers, who receive from \$500 to \$700, according to seniority, in Milwaukee German is taught exclusively by men, whose salary the first year amounts to \$1,000. German female teachers, or, more correctly speaking, female teachers of German in public schools, however, are not few. It must not be forgotten that other than German children are to be taught, and consequently a thorough knowledge of the English language is indispensable; otherwise bad English would counteract the good to be effected by German instruction among German children. Hence, women who have immigrated from Germany are for the most part unsuitable, and young women of German parentage who have attended American public schools and studied German privately are almost exclusively depended upon. For reasons difficult to determine, the number of young women among Germans who devote themselves to teaching is insignificant, so insignificant that now and then more vacancies occur in schools than there are teachers to fill them. In most cases, even if they pass a good examination, candidates have had no experience whatever in teaching. This must be acquired in practice, as there is no seminary for German.

In most cities where the school superintendent is not a German, the examination of German teachers is held by the German members of the school board. Candidates are examined in English and German; they are required to write a translation from one language into the other, analyze what they have translated, and are finally required to answer some questions orally. A few years since the author attended an examination in a Western city; there were six candidates, and it continued two hours. The women were allowed to converse, assist one another, and correct one another's mistakes. The committee on examinations consisted of three gentlemen, who were all exemplary citizens, but could not write a German letter of twenty lines without a mistake. No reproach is intended, but it is important to gain a clear view of the situation.

Since the above article was written conditions have very much improved; but the main evil spoken of has not been remedied. It is encouraging to note that educators are making a zealous effort to have positions filled by only competent teachers, and to root out the evil of having dilettantes following the profession for want of a better means of livelihood and giving it up when something better is offered to them. During recent decades the teaching profession has begun to develop a worthy membership, which recognizes its honorable vocation; and it would be an injustice to deny that women have done their full part toward the elevation of the profession.

At a recent meeting of New England educators¹ A. E. Winship gave utterance to the views of American teachers who prosecute their labors in the spirit of the motto of Thomas Davidson, and closed his address with the following golden text: "As the teacher is, the school is; as the school is, the child is; as the child is, the world is."

These words indicate the same ideals to which German educators aspire, and the motives which prompt them in their work—motives whose weight in forming a cultured people has been recognized since the Austro-German war of 1866, which gave rise to the pregnant words: "German teachers won the battle of Sadowa."

Whether wisely or not, the results of the effort to ascertain to what extent German instruction has been introduced in normal schools must be omitted. But it is a positive fact that German is taught in many institutions, and that the students take a great interest in it. The average number of students in the Normal College

¹ The American Institute of Instruction. See the annual reports of proceedings.

of New York City registered in 1899 was 2,560; the number of students studying German in June, 1899, was 303.¹

According to Hinsdale's article on "The training of teachers," page 13, German has been taught at the oldest normal schools in existence for upward of sixty years. Students of normal institutions connected with universities (as the Teachers' College of New York City, with Columbia University since 1898) have every opportunity of attending all the courses of the German department. The programmes of study of the different colleges and universities have specified the numerous German courses that have the value of German seminaries and are designed for normal training.

A few items relative to the attendance on German instruction in normal schools were given by Professor Ferren at the meeting of the German teachers of Pennsylvania, April 9, 1898:

A few words about German in our normal schools will not be out of place here. In New York, Massachusetts, Ohio, and several other States the normal schools accept a thorough training in German as a substitute for Latin. In answer to circular letters sent to 130 of these schools, I find that 25 per cent of the principals insist on Latin, while the remaining 75 per cent are willing to accept German as an equivalent. I have reason to believe that most of the normal school principals in this State are in favor of permitting a choice between the two and would vote to have the present State law modified to that effect. The demands made upon normal students are such that there is hardly time to study both languages thoroughly. Hence it is thought best to learn one of them well rather than obtain a smattering of both. But the standard of our normal schools is anything but uniform. For instance, in Massachusetts the normal preparatory course coincides with the high-school course, which makes a Latin-German group possible. Let us hope that Pennsylvania also may soon require a high-school diploma representing four years of work for admission to the normal schools. At any rate, the attitude of these schools toward German is too important to be overlooked. Normal graduates with a thorough training in German could make good use of it, even if they were never asked to teach it, and could do much to further our cause in communities—and there are such—where the old Know Nothing spirit still prevails.

Let us see what united effort will do for this State. Each one of us should endeavor to have something placed to his credit before the next meeting. We must try to make a better showing in the next official Report of the United States Commissioner of Education and of our State superintendent.

The speaker added that in Pennsylvania only 18.4 per cent of the candidates for teaching study German; in New Jersey the proportion is 27.2 per cent, and in Maryland fully 31 per cent.

From what has been said we may confidently affirm that the momentary need of German teachers is relatively no greater than that of thoroughly trained teachers in general. From the increased attendance in recent years in the German departments of universities, it is to be hoped that in the course of time a qualitatively and quantitatively sufficient supply will satisfy the growing demand for German teachers. This expectation is the more justifiable, as the effect of the resolutions of the "entrance-examination board" in regard to the position of German in secondary schools shows that the percentage of pupils studying German has risen more rapidly than was formerly the case.²

The German-American normal schools play no unimportant part in the training of German teachers. Director Dapprich, of the National German-American Normal Seminary, mentions five:³

- I. The National German-American Normal Seminary (Milwaukee).
- II. The Catholic Normal School of St. Francis, Wis.
- III. The Lutheran Normal School in Addison, Ill.

¹ Twenty-ninth Annual Report of the Normal College, for the year ending December 31, 1899 New York, 1900, p. 20.

² Compare the data given in Part I and in the closing section of this part.

³ German Schools in Foreign Countries, p. 347.

IV. The Lutheran Normal School in Seward, Nebr.

V. The Lutheran Normal School in Elmhurst, Ill.

The first-mentioned institution deserves special consideration, not only because of the announcement made, but because of its great influence despite its modest size. Its history illustrates, at the same time, the action of the German Teachers' Association, which purposes to advance "mere teachers of language to become representatives of German methods and agents of German culture in America."

In the year 1874, at the fifth annual meeting, it was unanimously resolved to establish the seminary on the foundation of the present high status of the art and science of education. A special "Seminarverein" was constituted to promote the agitation and collect a "German national subscription fund" of \$50,000 to \$100,000. The first general meeting was held in Milwaukee in 1877, and, though it possessed not much more than one-fifth of the prospective large "national fund," the opening of the institution was set for September 1, 1878. The "German-English Academy" in Milwaukee offered a suitable building for the beginning of the normal courses. According to the prospectus, this institution aims to educate thorough and zealous teachers, able to teach in German as well as in English, familiar with the most recent progress in pedagogics, and trained to present their own knowledge to pupils in an appropriate manner. For this purpose the school is provided with the best trained teachers, excellent appliances for instruction and accommodations, and a model school in the flourishing German-English Academy. By its connection with the athletic training school of the Nordamerikanischer Turnerbund, students enjoy the advantage of perfecting themselves in all branches of physical culture. There is likewise a normal course for kindergartners.

In the years 1878 to 1880 there were 500 applications, of which only 119 could be considered. The majority of the applicants could not support themselves during the three years required for their training. The rejection of applicants on account of lack of means was the more painful to the directors of the institute, as there were seldom more than twelve students during the time specified; the results obtained with these, however, were very satisfactory. Professor Rosenstengel, of the State University of Wisconsin, asserted that "nearly all the students are practically educated teachers, familiar with school and educational methods, thoroughly acquainted with the knowledge needed in their profession, and fully imbued with the necessary enthusiasm. All are enthusiastic advocates of the preservation of the German language and the dissemination of German pedagogics, and most of them are filled with a spirit of the purest devotion to the great tasks of modern education."

Such circumstances necessitated the foundation of a scholarship, and an appeal to Germans received a rather favorable response. After the Woman's Association of Cleveland and the members of the Seminarverein set the good example, New York contributed large amounts. This city formed the central association of the normal school foundation of New York and vicinity, which contributed \$2,000 in individual amounts to the fund; the Hermann Uhl memorial fund, founded by Madame Anna Ottendorfer in New York, contributed \$10,000.

In the year 1886 the German-English Academy turned over all its property free of cost to the institution, which assumed the mortgage debts; thus it came into possession of a building of its own. The efforts of Director J. Keller to remove the school to New York, where it could enjoy a larger attendance, were consequently in vain. Mr. Keller resigned and Mr. Emil Dapprich at once succeeded him, in 1888. The annual attendance of the seminary since its establishment has averaged 36 to 39.

The financial condition of the institution is very satisfactory, its property amounting to \$140,000 in 1900. Every year a benefit play is given in the Pabst Theater of Milwaukee for the scholarship fund. The students collected a fine herbarium

of 5,000 plants in 23 books for the department of education at the last Paris Exposition.

The programme of action followed by Mr. Dapprich is short and expressive: "The preservation and care of the German language, the promotion of national education, and the dissemination of sensible pedagogical ideas."

On his visits to the seminary in the years 1897 and 1900 the author received the impression that this excellent programme was being successfully carried into effect.

V. PAROCHIAL SCHOOLS.

According to the statistics of the German Teachers' Association, nearly half of all pupils studying German belong to Catholic, Lutheran, or Evangelical parochial schools. Although it is impossible to give these the attention which they deserve, they can not pass altogether unnoticed.

In the first place, it must not be forgotten that parochial schools two hundred years ago first introduced German instruction and laid the foundation of the present proud structure. This honor can never be taken from them, and their traditions will not be lost in never so long a course of development.

Superintendent Knortz has given a not very alluring account of the present condition of parochial schools in his article on German Nationality in the United States. His views are of great interest, even if, as a former speaker of a free religious society, he may not have regarded affairs impartially. He writes:

German parochial schools are found in all parts of America where orthodox German communities exist. Religion forms the main branch of study and is taught in German, consequently pupils join the German parish of their parents. More German is taught in parochial than in public schools and less time is given to English. Very little is done for the spread of German literature and science, and as the teachers have for the most part been educated in synod seminaries, and are prejudiced against the classical writers of Germany, the greatest attention is given to the study of the catechism and Bible history. Parochial schools, therefore, are of minor importance from the point of view of general culture. The ministers educated here have no sympathy for German literature, and since they are more American at heart than German, it costs them little effort to conduct religious services in English instead of German. Their excuse is that the English language is better understood by the rising generation, and is consequently preferable.

The Missouri Synod, a fifty-year-old organization of strict Lutheran congregations in the States of Indiana, Ohio, New York, Illinois, Missouri, etc., claims the merit of unremitted and decided action for the preservation of German nationality.

There is an unusually large number of well-organized higher educational institutions of the Lutheran church in America for the education of ministers and teachers. Among them are a theological seminary in St. Louis, a theological seminary in Springfield, Ill., a complete gymnasium in Fort Wayne, Ind., another in Milwaukee, an under gymnasium in St. Paul, Minn., in Concordia, Kans., and in Neperan, N. Y., a normal school in Addison, Ill., the lower division of a normal school in Seward, Nebr., and the Walther College, of St. Louis, named after the renowned scientific and religious champion of this German church organization, Prof. Charles Ferdinand William Walther (born in Saxony in 1811, emigrated in 1839, and died in St. Louis in 1887). Sixty highly educated professors are engaged at these schools.

Within the districts of the Missouri Synod there are, besides, 19 charitable institutions, orphan asylums, homes for the aged, hospitals, etc. Its own publishing house, with an immense printing establishment, in St. Louis provides devotional and instructive works and has become noted in the whole Lutheran world by its beautiful edition of the complete works of Luther.

Among the conditions which govern admission to the synod and control a continuance of association, the constitution mentions: "The sole use of the German language in regulations." In the spirit of its constitution, the Missouri Synod states in one of its recent announcements: "We exhort all German Lutheran parents to afford their children every possible opportunity to acquire a sufficient knowledge of our beloved mother tongue by sending them to German schools and by speaking the German language at home."

In this spirit, likewise, the higher and other schools are conducted. With just pride the *Lutheran Rundschau* states in one of its recent numbers:

"Much is said of the duty of German nationality in behalf of the culture of the American people. Among those who have labored most zealously for fifty years to fulfill this duty, the German church of America ranks first and the Missouri Synod stands forth preeminent. What it has done, and continues to do, for the advancement of German manner and nature in the best and noblest sense of the terms deserves general esteem and recognition. Its congregations, teachers, and ministers are German—even those of the second and third generations living in this country—and by German religious services, as well as by German instruction in schools, German consciousness, German thought is preserved, harbored, and nurtured among them. The synod provides in a truly German way for the spread of German education, without degenerating into bigotry and with a full consideration of the demands which the peculiar relations of this country make upon it. Most of the numerous journals edited by it or published within the limits of its jurisdiction appear in the German language and contribute, in every respect, toward the preservation of German method and thought."

All this sounds very encouraging, but we must not forget that already evening worship in several communities is conducted in English and that the Missouri Synod is a fully armed opponent of all intellectual progress which is not in harmony with the inexorably strict doctrine of its church. The German nationality of that organization is therefore nothing more than extreme Lutheranism.

The General Synod, a union of less strict Lutherans, on the other hand, believes that the exclusive use of the German language jeopardizes their influence; and, consequently, so that its ministers shall lose no hearers, it commands them to use the English language in churches and Sunday schools wherever children have lost the knowledge of German.

In the official organ of the synod, the *Lutheran Church Friend*, published in Chicago, a minister in a small city of Nebraska writes under the date March 19, 1896:

"As far as the language is concerned, it is a general fact that children want to speak English, and when they attend English day schools they do not even learn to understand German properly. Even when German is spoken in the family children have only the barest knowledge of the language, of literature, and of religion, and if they understand it lose all interest, because they can not express themselves fluently. The consequence is that children attend other schools and gatherings and are lost to their own church.

"I am sincerely sorry to be obliged to make such comments. I know families in which disagreements have risen between parents and children on this very account.

"The parents desired to remain German and be faithful to their own church, but the children felt a greater attraction toward other churches simply because of the language. In other cases German children become careless in regard to religion, as though Christianity were meant only for old persons. As excellent as it is, and as correct as its doctrine may always have been, German church work is not practical for the rising generation in America. We shall be a factor as long as the older generation survives. After it has departed German churches will be a thing of the past.

"If our communities would occasionally hold services in English, so as not to leave the impression that Lutheranism and German nationality are identical, the young would be much more closely united with them and be a surer element of the church. Versatility of language is one of our very advantages. The Lutheran Church is represented in 75 languages or dialects. Then why should we adhere so religiously to German? Where it is understood and properly used the German language is magnificent—I may say incomparable in its magnificence, but where such is not the case disputes and command avail nothing. Thou shalt speak German! The truth is that children born and raised in America do not love German. Then why should we torment ourselves? Our churches are not dealing with German nationality, but with Christianity."

The German Catholics of America have frequently referred to the advantages which they have gained by preserving German nationality in their parochial schools, founded and sustained at a great sacrifice of money. The Catholic Church in America is chiefly under the influence of Irish bishops, who have no predilection for the German language. It often happens that a parish established by Germans is placed in charge of an English-speaking Irish priest without the Germans making any objection. Any opposition would be unavailing, as each bishop is the lawful owner of the churches and schools within his diocese and can close them at any time.

In May, 1897, the Pope issued the following ordinances:

"I. American-born children whose parents speak a language other than English are not bound, after they are grown, to be members of the same parish to which their parents belong. They have the right to attach themselves to a parish in which the language of the country, English, is spoken.

"II. Catholics not born in America, but conversant with the English language, have the right to attach themselves to a parish in which the English language is made use of, and can not be compelled to subject themselves to the jurisdiction of a pastor whose church has been built for those who make use of a foreign language."

From this it is to be understood that the intention of Rome is to make English the sole language of the Catholic Church in America as soon as possible.

Parishes making use of a foreign language are only supported temporarily, and will be suppressed as soon as the conditions which made their foundation necessary will have changed.

These ordinances provoked great resentment among the German Catholics of several cities, and they protested strongly against them in meetings. At a meeting of German Catholics held in June, 1897, in Detroit, Mich., the following resolutions were adopted:

"The German Catholics of Michigan are faithful, law-abiding citizens of the United States, ready to sacrifice life and property for this Republic. As loyal citizens of these free States we protest against all measures which are prejudicial to the German language, German customs, German faithfulness and honor.

"At the same time we raise a loud protest against the presumptuous attempts of certain Catholic nativists to lower Germans to Catholics of second grade, divide their parishes, and gradually absorb them.

"A systematic suppression of the German language and German thought is a constant menace to the Catholic Church in America, which has developed to a high degree of prosperity through European immigration. We consider the introduction of a false, unjustifiable nativism into religion a fatal error, that portends the worst consequences for the continuance and development of the church."

The personal impressions of the author have been that those who superintend the schools are more concerned about the preservation of the German language than would be supposed from the report of Knortz. During one of my Western trips¹ I went to the town of Waverly, which has about 4,000 inhabitants and is the county seat of Bremer County, in the northeastern part of the State of Iowa. The prairies between the Mississippi and Missouri are, in general, not more attractive than the heath of Lüneburg. The valley of the Red Cedar River, however, affords a pleasant break to the endless monotony, and so the friendly town of Waverly leaves the impression on the traveler who has reached the hills that border the river's course as being an oasis in the desert. A very broad avenue cuts through the town. Following this to the northwestern end of the city, we come to a group of buildings surrounded by beautiful grounds, the foremost structure bearing the inscription "Wartburg College," in large letters. I visited the school, and Director F. Lutz kindly conducted me through it. The institution is partly an "academy" for general study and partly a "seminary" for such members of the Evangelical Lutheran Church as desire to become teachers. If they are to continue in the service of the synod at least five years they enjoy a reduction of expenses to the astonishingly low terms of \$2 a week for board and \$40 a year for lodging, instruction, heat, and light. As regards German instruction, the prospectus states:

The German language may justly be considered the key to all possible classical treasures of science and literature. Besides, a knowledge of German is just as practical for the purposes of a business man as for those of a man of letters. A young man who is able to speak German, together with the language of the country, enjoys great advantages over his competitors, whatever his occupation may be. The institution offers special advantages to those who intend to make a thorough study of German. German is taught as a living language; that is to say, pupils learn not only to read and write it correctly, but to speak it. Besides grammar, orthography, composition, and translations from English, great stress is laid upon reading the best German authors.

¹ The account which follows is taken from an article by the author in a New York paper of November 25, 1900.

This programme can certainly be approved, and the reputation which the "Wartburg" enjoys beyond the limits of the State is well deserved. I also visited Prof. August Engelbrecht, the head teacher next to the director, and a member of the board of administration, Pastor Br. Lobeck, in Knittel. With both of these gentlemen I found true German thought, and, what is to be doubly appreciated in this temperance State, true German hospitality. Such Lutheran communities adhere strongly to German nationality. In the city of Clinton, Iowa, there is another "Wartburg College," conducted on the same lines.

From Deindörfer's History of the Evangelical Lutheran Synod of Iowa (Chicago, 1897) we learn that there are different kinds of Lutheran parochial schools. Very few are open the whole year. Most of them are open only during the winter session, and the instruction given is little more than a preparation for confirmation. The author states (page 271): "The schools are accordingly mostly attended for two or three winters by the older children that are going to be confirmed. Instruction is limited to the most necessary branches, and much time is given to religion." As a matter of course such schools can do little, but German institutions like the "Wartburg" are of the same significance to them as were the castles of the Middle Ages to feudal life.

According to the investigations of the German Teachers' Association, Catholic schools have almost twice as many pupils (193,627) as have the Lutheran (85,984) and the Evangelical (19,880). As Zimmermann states,¹ Catholic colleges have given a proper degree of attention to modern languages from early times. He says of the St. Louis University, in St. Louis, Mo.: "The college was recognized as a State university in February, 1833,² and received all the usual privileges. The Jesuits responded so unreservedly to modern demands that they admitted students unacquainted with the classical languages to the academic grades. Most Catholic colleges," Zimmermann continues, "have a scientific course of four years. The first three years correspond to the first three years of the classic course, although modern languages, natural sciences, and bookkeeping take the place of the classical languages."

German instruction accordingly possesses a firm support in Catholic parochial schools. German Catholics in this country have repeatedly announced their firm purpose not to give up their mother tongue. As a companion to the resolutions adopted by the Catholics of Michigan in 1897, the resolutions passed by the Union of the Catholic Associations of Illinois deserve to be mentioned:

Our love for our adopted country is not lessened by our clinging to German methods implanted in us by God himself. It rather enables us to give our service more unselfishly to our glorious Republic in all things affecting its prosperity. As peaceable citizens we desire peace and despise from the depth of our hearts the instigations of a mercenary press that is endeavoring to separate friendly nations.

As the representatives of 30,000 Catholic German men of this State we hereby declare that the honor of the German name, the preservation and care of the German language and the justifiable interests of the German element in the United States are and ever will be dear to our hearts. It is always the German Catholic who is first assailed by the machinations of nativists, and stands in the front line of battle when there is question of the equal rights granted to all citizens by the Constitution.

In this struggle we are one with the German Catholic State organizations of all other States of the Union, and we are glad when other German-American associations unite with us.

German Catholics in this country are, therefore, sure to be the last to give up German instruction. When it is no longer continued in public schools they will provide for it in their own parochial schools.

¹ Chapter on Catholic Schools in his treatise on Universities in the United States of America.

² St. Louis University was incorporated by the legislature of the State of Missouri by an act of December 28, 1832. This evidently is what the author means.—ED.

VI. ASSOCIATION SCHOOLS AND PRIVATE SCHOOLS FOUNDED BY INDIVIDUALS.

In proportion as German was introduced into public schools, elementary and intermediate, German schools founded by German associations and individuals steadily decreased. Their number has rapidly lessened in the last ten years. At present there are hardly more than a few hundred throughout the States. Knortz, Dapprich, and many others are of the opinion that the illiberality of wealthy German-Americans has more to do with the decadence of German private schools than the change in the public-school curriculum. To quote again from the article by Dapprich: "Intelligent persons of means, who foolishly spend large sums of money on luxury, send their children to overcrowded public schools to save the moderate tuition fee of a private school."

These censurable motives may be true in single instances; on the whole, however, it is to be hoped that intelligent parents send their children to public schools from principle, and therefore strive more earnestly to have German instruction introduced and the "Quincy methods" adopted. The reasons why sons of foreign-born citizens should attend American schools have already been given. Specifically German schools in this country are only justifiable where public schools do not give what parents have a right to expect, and do not pay sufficient attention to German.

According to the investigations of the teachers' association, only 35 private schools had 100 pupils and more; of these but 8 had an attendance of 200 or more. The 871 schools reported in the statistics had an average attendance of only 21 or 22. Consequently, German schools of this order in America have no further prospects; the possibilities of the development of German instruction in American schools, on the other hand, are practically unlimited.

From a consideration of European influences on the formation of American educational conditions, it is evident that Americans regard everything foreign with a certain mistrust; in single instances this is more or less justifiable. However, they willingly accept all progress which proceeds from the Old World after it has been adjusted to American conditions by suitable intermediaries. The self-consciousness of a great nation is not hurt by the circumstance that what has been done by other nations in the way of culture is in this way assimilated, but it resents being taught by others. The fact is thus understood that German schools in America are losing ground, though the demand for German instruction is steadily increasing. The schools of the German immigrants had a great cultural mission to perform, but in the main this work has been done; and so teachers of German schools will help the cause of German instruction decidedly more if they give their energies to American schools.

Besides, the American and the German comprehension of the main purpose of schools is sometimes essentially different. Public schools are intended to educate their pupils for practical life, and not to spread higher education. Therefore it is important to follow the American maxim, "practical above all," more than the estimable German motto, "always thorough."

The following are particularly flourishing German schools: Hoboken Academy, Hoboken, N. J., in existence forty years, present director Dr. Kaiser; the Beacon Theological German-English School, the German-English Presbyterian School, the German-English School, and the First Ward German-English School, in Newark, N. J.; the Adelphi Academy, in Brooklyn, N. Y.; the School of Free Congregations, and the Concordia Seminary, in St. Louis, Mo.; the General German School, in Lawrence, Mass.; the Normal Seminary, in Addison, Ill.; the Proseminary, in Springfield, Ill., and Concordia College and German-English Academy, in Milwaukee. The last-mentioned institution celebrates its fiftieth anniversary this year and has a long life before it. All these institutions have a full force of excellent teachers,

and their many graduates are interested in their continuance and provide for attendance.

Among smaller German schools the author became well acquainted with Hertzog's German-American School, in Philadelphia, from occasional visits. The object of this school is to furnish a thorough and practical German and English education. The school comprises three departments, the primary, intermediate, and senior. The term of study in each of these departments is two years. The course of instruction embraces object lessons, German and English (reading, orthography, comparative grammar, composition, elocution, literature), French, arithmetic, history, geography, natural history, algebra, geometry, penmanship, drawing, and singing.

As this school has been prospering for twenty-five years it must supply a deeply felt want. Of all the important cities in America Philadelphia pays the least attention to German, excepting, of course, the university. If there were a large opening for German private schools anywhere, one would suppose it to be in that city; but such is not the case. There is but one large female school (Miss Stevens's School, in Germantown), and that numbers 200 pupils.

VII. SUMMER AND NIGHT SCHOOLS, KINDERGARTENS, AND INSTRUCTION IN ATHLETICS, SINGING, AND MANUAL TRAINING.

According to Professor von Holst, Chautauqua is the greatest wonder in America, except Niagara Falls.

Chautauqua is a place on Lake Chautauqua, in southwestern New York. It is a popular educational resort during the months of July and August for several thousand people, who go there from all parts of the country to hear lectures and music, to attend class courses of instruction, to enjoy college life and open air. Chautauqua is a well-nigh deserted village during nine months in the year, but in the summer season it has a cottage and hotel population ranging from 3,000 to 19,000 people. It is a kind of educational Bayreuth for the people.

Herbert B. Adams, in the monographs on education in the United States, thus describes this wonderful summer school, which has been formed, in connection with a former Methodist camp meeting, on one of the most beautiful spots on earth. We must refer to it because German is taught in its college of liberal arts. The central school, 25 years old, and the 300 branches established in nearly all the States of the Union, have a "School of modern languages," as has likewise the Catholic Summer School of America, at Plattsburg, N. Y., on Lake Champlain. The peculiarly American "Chautauqua idea," promoted by a monthly magazine, *The Chautauquan*, includes the study of modern languages, and has probably made a large number of persons acquainted with German language and literature. President Harper, of the University of Chicago, was for some years principal of the Chautauqua central school.

Many universities, as Harvard, Cornell, Columbia, and New York, have instituted summer schools. The courses of study of these university summer schools also include German. It seems that ample opportunity is thereby afforded to Americans to become familiar with German literature, which is the main purpose of the study of German; pupils are required to have an elementary knowledge of the language before entering.

The course of study of the summer school of New York University in the department of Germanic languages may serve as an example:

In this department work is arranged to meet the wants of two classes of students—those who desire to get or to broaden a somewhat elementary knowledge of German, and those who, already possessing a good knowledge of the modern language and literature, desire to increase this by a study of some of the older Germanic dialects, or by a careful investigation of some important literary period. This last class of work is especially for teachers of German. All courses five hours weekly.

For the first the following courses are arranged:

Beginners' course in German.—The work in this course will comprise a rapid survey of the important parts of the grammar, the reading of some easy and interesting stories, and as much practice in conversation as the time allows.

Advanced course in German.—The work in this course will comprise a careful study by the students of some piece of classical literature, and lectures by the professor upon the literary period immediately concerned. This year selection may be made by the class from the following: Goethe's Tasso, Götz von Berlichingen; Lessing's Minna von Barnhelm, Emilia Galotti; Schiller's Jungfrau von Orleans and Maria Stuart.

As much time as possible will be given to conversation. The leading methods of teaching modern languages will be discussed and illustrated.

For the second the following courses are arranged:

Elementary course in Gothic.—Daily recitations from Braune's Gotische Grammatik and reading of selections from the Gospels.

Elementary course in Old High German.—Daily recitations from Braune's Althochdeutsche Grammatik and readings from Braune's Althochdeutsches Lesebuch.

Elementary course in Middle High German.—Daily recitations from Paul's Mitelhochdeutsche Grammatik and reading of Der Arme Heinrich.

Advanced course in modern German prose.—Two of the important novels that have appeared during the last ten years will be read and discussed.

What summer schools afford to the middle classes, night schools give to the working classes free of cost. They are supported partly by cities and partly by associations. The German-American School Association of New York, for instance, aims to preserve the German language in the city of New York by promoting German instruction and supporting German classes for children of impecunious German-Americans. Among the associations which thus promote German instruction among the people, German athletic associations rank first in order. Besides devoting themselves to physical development, they pay great attention to "mental culture," and support classes therefor that are held in their own halls; at night for adults and on Saturdays and Sundays for children. The large Philadelphia Athletic Association supports a Saturday school of several classes in Philadelphia, and the turners of Southwark have introduced a similar institution for Sundays. In New York similar schools founded by athletic associations exist.

German labor unions support the same kind of German schools in different places; one of their Sunday schools is located in Philadelphia. A competent judge states that "laborers of all kinds and every degree of education instruct, well or badly, as the case may be, young American-born Germans in the most necessary branches of study."

Nearly all of these schools possess small German libraries, by means of which their pupils can, in the course of time, acquire some knowledge of German literature. The desire for learning is generally much stronger among the laboring than among the middle and higher classes, which strive after the "mighty dollar" alone and make all things else subservient to that interest.

As far as kindergartens are concerned, Froebel's celebrated prophecy, in his standard work on education (page 333), that his system would be thoroughly understood and properly appreciated only in America, is being verified to a greater extent every year. Americans are much more enthusiastic over "kindergarten-ing" than the Germans themselves, among whom the "nemo propheta in patria" is again confirmed. Boone states, in his remarkable essay, *The Renewal of Life*, that Mrs. Carl Schurz opened the first kindergarten in America, in Watertown, Wis., in 1855. Through her Miss Elizabeth Peabody became acquainted with the idea, and followed her example in Boston in 1860. However, it was only after she had learned, in Germany, to know the methods applied there and had seen the results thereby attained that the editress of the *Kindergartner Guide* became the pioneer of this system of pedagogics in America, as was Madam von Marenholtz-Bülow its champion in Germany. Kindergartens have existed in Hoboken since 1861, and in New York since 1864. Dr. Harris exerted his efforts to introduce

them in St. Louis, and published an interesting account in his reports for 1876 and 1877 on the results of the kindergarten in St. Louis. At present kindergartens are firmly established in all parts of the country and are enjoying steadily increasing favor.

Special praise is due to American pedagogical literature for its untiring and energetic promotion of Froebel's ideas. This is done in the full consciousness that German methods of instruction are, in this way, brought into American schools. The following statements from the preface with which Dr. Harris introduces Hailmann's translation of Friedrich Froebel's *Education of Man* serve as a proof:¹

This work of Froebel admits us into his philosophy and shows us the fundamental principles upon which he based the kindergarten system. His great work is *inner connection*. There must be an inner connection between the pupil's mind and the objects which he studies, and this shall determine what to study. There must be an inner connection * * * within the soul that unites the faculties of feeling, perception, phantasy, thought, and volition, and determines the law of their unfolding. Inner connection is in fact the law of development, the principle of evolution, and Froebel is the educational reformer who has done more than all the rest to make valid in education what the Germans call the "developing method."

It was logical to expect that the educational system which was so ready to accept kindergartens would make room for German manual training instruction in public schools. Wherever it has been introduced, it has succeeded so well that it may be justly considered a permanent feature of the American educational system. In the years 1867 and 1868 Andrew D. White made a study of German industrial schools with a view to their introduction in America, a step which has, in the meantime, been successfully taken. It may be opportune to mention that Steuben himself recommended the founding of the military school at West Point, though he did not live long enough to see it carried out.

Athletics, which have attained a stage of perfection in the college gymnasiums in decided contrast to the modest German beginnings, and for which Americans are to be envied, are an essential outcome of German influence on American education. The fame of these improvements, which deserve to be imitated by Europe, can not be taken from America; still the impulse of their action undoubtedly proceeded from Germany.

Thomas Wentworth Higginson expresses himself² on this point as follows:

The history of modern gymnastic exercises is easily written. It is proper to say modern, for, so far as apparatus goes, the ancient gymnasiums seem to have had scarcely anything in common with our own. The first institution on the modern plan was founded at Schnepfenthal, near Gotha, in 1785, by Salzmann, a clergyman and the principal of a boys' school. After eight years of experience his assistant, Gutsmuths, wrote a book upon the subject, which was translated into English and published at London in 1799 and at Philadelphia in 1800, under the name of Salzmann's *Gymnastics*. No similar institution seems to have existed in either country, however, till those established by Voelckers in London in 1824, and by Dr. Follen at Cambridge, Mass., in 1826. * * * It is the Germans and the military portions of the French nation chiefly who have developed gymnastic exercises to their present elaboration, while the working out of their curative applications was chiefly due to Lingg, a Swede. In the German manuals—such, for instance, as Eiselen's *Turnübungen*—are to be found nearly all the stock exercises of our institutions.

A practical educator, Superintendent Philbrick, of Boston, expressed himself concerning the introduction of gymnastic training in the following manner:

For more than sixty years gymnastic training has constituted a prominent element in Prussian school education. Jahn, the great early promoter of physical training in Prussia, is now justly reckoned among the benefactors of his country, and, in recognition of the benefits of his labors, a noble statue has been erected to

¹ Friedrich Froebel, *The Education of Man*, translated by W. N. Hailmann, superintendent of public schools at Laporte, Ind. The International Education Series, No. 11.

² In his *Outdoor Topics*, p. 142-143.

his honor in Berlin. In Berlin gymnastics have been longer and more generally cultivated, perhaps, than in any other city. In that city there has existed for a long time a large and well-appointed government establishment for the training and preparation of teachers of gymnastics for the public schools. Although Vienna has been comparatively tardy in adopting this educational improvement, she now probably surpasses all other cities in respect to liberality of provision for gymnastics. In every recently erected school edifice, whether for elementary or secondary schools, the spacious and lofty gymnastic hall, with adjacent ward-ropes and other accommodations, is provided. There are at present 110 special teachers of gymnastics constantly employed by the city in public schools. The educational authorities of Vienna are fully justified in their large expenditures for the physical training in view of the acknowledged advantages which have been derived from it in northern Germany.

In speaking of physical training in the German schools, Matthew Arnold says: "The teachers (of gymnastics) profess to have adapted their exercises with precision to every age and to all stages of a boy's growth and muscular development. If boys have long work hours or if they work hard, gymnastics probably do more for their physical health in the comparatively short time allotted to recreation than anything else could. In England the majority of public-school boys work far less than the foreign schoolboy, and for this majority the English games are delightful; but for the few hard students with us there is in general nothing but the 'constitutional,' and this is not so good as the foreign gymnastics."

In the German and Austrian schools gymnastic training is not provided for boys alone. Girls also receive the benefit of regular physical exercises especially adapted to the different stages of their muscular growth. I have long been impressed with the lamentable defect of our city systems of schools in respect to physical education. After seeing what has been done for this essential branch of education in Vienna and Berlin, our own deficiency in this respect seems tenfold more glaring. A radical reform is needed. Fourteen years ago I began my efforts to introduce into all grades of the Boston schools "a thorough system of physical training as a part of school culture." Some progress has been made in this direction. For some years the programme has required daily physical exercises in the schools, but as yet our provisions for physical education are very inadequate. So far as I know, there is not a single special, thoroughly qualified teacher of gymnastics employed by any city in America. To my mind, nothing is more certain than that the highest success in intellectual education can be reached only by the aid of the most thorough system of physical training.¹

Twenty-seven years have passed since Philbrick delivered this speech, and in that time athletic instruction in schools has made great progress. In many States German societies, in union with the German press, are striving for its introduction, and in Pennsylvania, Ohio, and California their efforts recently have been successful. Much work remains to be done before the physical development of the young throughout the country will approach the ideal of "*mens sana in corpore sano*," as in most colleges. Even many New York schools² lack advantages for athletics or conduct the exercises in localities without proper hygienic arrangements.

Finally we come to singing, that may boast of unquestionable German origin. Knortz states:³

The introduction of athletics and music in public schools is due exclusively to German-Americans. Before the immigration of 1848 Americans considered the study of music an unpardonable waste of time. At the present day, however, all cities have their singing societies that frequently excel the German, because Germans usually join such societies for social amusement, whilst Americans, without exception, become members only to study music.

Many of the teachers of athletics and singing have been educated in the German-American Normal Seminary of Milwaukee, which has an excellently conducted normal course in athletics. Instruction for the most part is, therefore, in charge of

¹ From an address by Hon. J. D. Philbrick, of Boston, on "Systems of public instruction in European and American cities compared," given at the meeting of the department of superintendence of the National Educational Association at Washington, January 30, 1874.

² For instance, the College of the City of New York, which will not have a gymnasium until it occupies its prospective new building.

³ *Das Deutschthum in den Ver. Staaten*, pages 77 and 78.

German teachers. Consequently it is not to be wondered at if American school children sing German songs. It has often occurred that at large reunions of singing societies and similar occasions all the school children have sung *Die Wacht am Rhein* in public with great applause. By singing songs in German, English-speaking children acquire a small German vocabulary. At a German teachers' meeting a teacher told the author that he always taught his English-speaking pupils how to sing a number of easy German songs, and with the few words thus remembered he was able to advance them.

Independently of the schools mentioned, many opportunities are afforded for learning German, as, for instance, in the Berlitz schools of modern languages. To what extent the Chautauqua Literary and Scientific Circle, which was incorporated in 1883 as the Chautauqua University, the Correspondence University, Ithaca, 1883, and numerous similar educational agencies, devote themselves to the German language and literature, could, unfortunately, not be ascertained.

VIII. STATISTICS OF GERMAN INSTRUCTION.

The "committee for the care of German," appointed by the German-American Teachers' Association, has recently published the following:¹

Number of pupils studying German in the schools of the United States.

	Universities.		Public high schools.		Public elementary schools.		Catholic schools.	
	Number.	Pupils.	Number.	Pupils.	Number.	Pupils.	Number.	Pupils.
New York and New Jersey.....	13	2,750	150	8,448	5	68,506	56	15,703
Ohio.....	13	1,076	67	3,885	3	59,119	128	30,680
Illinois.....	8	1,152	43	3,872	33	34,206	155	24,559
Northwest.....	11	2,178	113	6,223	4	5,380	250	34,824
Wisconsin.....	4	775	52	3,157	3	24,904	176	20,983
Pennsylvania.....	5	350	46	4,027	3	5,754	90	21,214
Indiana.....	5	449	26	1,088	3	8,417	92	14,146
Southeast.....	4	456	43	3,543	2	8,400	48	13,408
Michigan.....	4	630	69	3,350	1	1,030	36	8,759
New England.....	10	3,120	50	4,516	—	—	5	436
Southwest.....	5	1,510	22	1,275	40	4,450	23	2,290
West.....	7	1,452	18	1,736	2	2,507	8	904
Total.....	93	14,698	739	45,670	143	231,673	1,046	193,627

	Lutheran schools.		Evangelical schools.		Primary and secondary private schools.		Total.	
	Number.	Pupils.	Number.	Pupils.	Number.	Pupils.	Number.	Pupils.
New York and New Jersey.....	89	5,284	22	644	195	4,767	532	106,102
Ohio.....	67	5,093	17	557	38	823	356	101,233
Illinois.....	263	20,625	137	4,366	34	776	655	89,236
Northwest.....	579	22,320	202	7,031	81	1,993	1,246	72,949
Wisconsin.....	168	10,891	34	983	20	573	462	68,246
Pennsylvania.....	24	1,512	8	203	81	2,734	256	35,794
Indiana.....	96	6,850	22	734	8	298	232	32,502
Southeast.....	39	2,340	—	—	141	2,532	279	20,679
Michigan.....	121	7,852	56	4,129	10	175	292	25,946
New England.....	13	735	14	614	110	2,503	246	11,294
Southwest.....	57	1,896	17	481	84	863	247	11,535
West.....	15	536	7	138	66	653	123	7,926
Total.....	1,531	85,934	536	19,880	871	18,690	4,946	601,172

¹ The Present Position of German Instruction in the Schools of the United States (no date).

These statistics suffer from the same fundamental defect that vitiates all efforts in this direction, to wit, incomplete data. Furthermore, although the investigations were made only about two or three years ago, such progress has since been made that the figures given are far too small to show present conditions. We shall endeavor to add an estimate to these statistics that corresponds better with the position of the subject at the close of the century.

The term "universities" in the above table includes colleges also. The committee refers to 93 "universities," of which only the following 83 are mentioned by name in the pamphlet (pages 46 and 47):

Number of students of German in higher institutions of learning.

Location of institution.	Name of institution.	Professor.	Students of German.
Cambridge, Mass.	Harvard	Kuno Francke	1,100
New Haven, Conn.	Yale	A. H. Palmer	750
Madison, Wis.	State University	W. H. Rosenstengel	590
Hanover, N. H.	Dartmouth College	W. G. Stoughton	510
Berkeley, Cal.	State University	Albin Putzker	500
Stanford University, Cal.	Leland Stanford Junior University	Julius Goebel	494
Syracuse, N. Y.	Syracuse University	F. J. Holzwarth	450
Lincoln, Nebr.	State University	Laurence Fossler	430
Princeton, N. J.	Princeton University	Willard Humphreys	407
Minneapolis, Minn.	State University	John G. Moore	400
Ithaca, N. Y.	Cornell	H. S. White	400
Boston, Mass.	Boston University	Marshall L. Perrin	360
Iowa City, Iowa	State University	Chas. Bundy Wilson	350
Wellesley, Mass.	Wellesley College	Carla Wenckebach	318
New York, N. Y.	College of the City	Adolph Werner	300
Lafayette, Ind.	Purdue University	G. L. Swiggett	300
Chicago, Ill.	University of Chicago	Starr W. Cutting	300
Delaware, Ohio.	Wesleyan University	W. W. Davies	260
St. Louis, Mo.	Washington University	Otto Heller	250
Evanston, Ill.	Northwestern University	J. T. Hatfield	250
Bloomington, Ind.	Indiana University	Gust. E. Karsten	240
Philadelphia, Pa.	University of Pennsylvania	M. D. Learned	210
Greencastle, Ind.	De Pauw University	Henry B. Longden	210
Lawrence, Kans.	University of Kansas	Ernst Eggers	200
Columbus, Ohio	Ohio State University	Ben. F. Hoffman	190
Columbia, Mo.	University of the State of Missouri	Ben. F. Hoffman	187
Champaign, Ill.	University of Illinois	L. A. Rhoades	175
Williamstown, Mass.	Williams College	Geo. M. Wahl	175
Middletown, Conn.	Wesleyan University	Albert B. Faust	175
Poughkeepsie, N. Y.	Vassar College	Ottile Herholz	175
Mount Vernon, Iowa.	Cornell College	Francis A. Wood	150
New York, N. Y.	Columbia College	Wm. H. Carpenter	150
Tufts College, Mass.	Tufts College	Chas. E. Fay	150
Watertown, Wis.	Northwestern	A. F. Ernst	150
Galesburg, Ill.	Knox College	W. E. Simonds	140
Bloomington, Ill.	Illinois Wesleyan University	Wilbert Ferguson	130
Baltimore, Md.	Woman's College of Baltimore	Hans Froelicher	130
Do.	Johns Hopkins University	Henry Wood	125
Wooster, Ohio.	Wooster University	Gertrude Gingrich	125
Cleveland, Ohio.	Western Reserve University	Chas. Harris	120
Austin, Tex.	University of Texas	Sylvester Primer	114
State College, Pa.	Pennsylvania State College	Carl D. Fear	110
Grinnell, Iowa.	Iowa College	John S. Nollen	108
University Place, Nebr.	Nebraska Wesleyan University	H. Krumdiek	105
Eugene, Oreg.	University of Oregon	John Straub	104
Nashville, Tenn.	Vanderbilt University	A. R. Hohlfield	100
Burlington, Vt.	University of Vermont	Lewis J. Huff	95
Swarthmore, Pa.	Swarthmore College	Marie A. K. Hoadley	94
Lake Forest, Ill.	Lake Forest University	Geo. W. Schmidt	90
Columbus, Ohio.	Capital University	F. W. Stelliorn	89
Seattle, Wash.	University of Washington	Chas. F. Reeves	85
New York, N. Y.	New York University	Law. A. McLouth	80
New Orleans, La.	Tulane University	J. Hanno Deiler	80
Westerville, Ohio.	Otterbein University	Josephine Johnson	80
Fayette, Iowa.	Upper Iowa University	Myra Baker	75
Ada, Ohio.	Ohio Normal University	Carl Michel	70
Charlottesville, Va.	University of Virginia	Professor Emerson	70
Des Moines, Iowa.	Drake University	Gerh. J. Zepter	68

Number of students of German in higher institutions of learning—Continued.

Location of institution.	Name of institution.	Professor.	Students of German.
Chapelhill, N. C.	University of North Carolina.	Walter D. Toy	60
Appleton, Wis.	Lawrence University	Mabel Eddy	60
Athens, Ohio	Ohio University	Kate Cranz	56
Holton, Kans.	Campbell University	G. A. Hoffmann	50
Knoxville, Tenn.	University of Tennessee	J. B. Henneman	50
University, Ala.	University of Alabama	Wm. A. Parker	50
Athens, Ga.	University of Georgia	John Morris	50
Granville, Ohio	Denison University	W. A. Chamberlin	40
Georgetown, Tex.	Southwestern University	R. F. Young	36
Salt Lake City, Utah	University of Utah	Geo. R. Mathews	36
Columbia, S. C.	South Carolina College	Edw. S. Joyner	30
Laramie, Wyo.	University of Wyoming	Irene M. Morse	23
Lexington, Va.	Washington and Lee University.	W. S. Currell	25
Tiffin, Ohio	Heidelberg	Alf. K. Zembrod	25
Salem, Oreg.	Willamette University	Minnie Frickey	24
Lincoln, Ill.	Lincoln	C. Everett Conan	15
Williamsburg, Va.	College of William and Mary.	Chas. E. Bishop	20
Lebanon, Tenn.	Cumberland University	J. D. Hinds	20
Nashville, Tenn.	Fisk University	C. W. Dunn	20
Urbana, Ohio	Urbana University	S. Alice Worcester	18
Lewisburg, Pa.	Bucknell University	F. Loomis	-----
Lexington, Va.	Military Institute	T. M. Semmes	12
Blacksburg, Va.	Virginia Agricultural and Mechanical College.	T. P. Campbell	-----
Richmond, Va.	Richmond College.	F. W. Boatwright	16
Lecompton, Kans.	Lane University	R. W. Bahner	10

The ten institutions may have been omitted on account of the small number of their students, those mentioned numbering 14,365 of the total, 14,698. However, this inference is only a hint for determining the important point as to how many were not mentioned because they have no German department, or were omitted only because no answer was received.

As regards the 83 given, the attendance of the following, as ascertained by the author from more recent reports, differs from that stated above:

	Report figures.	Later figures.	Difference.
Harvard	1,100	1,200	+100
Yale	750	750	-----
Wisconsin University	560	560	-----
California University	500	550	+ 50
Leland Stanford Junior University	494	600	+106
Nebraska University	430	554	+124
Princeton University	407	407	-----
Minnesota University	400	450	+ 50
Cornell University	400	511	+111
University of Chicago	300	400	+100
Washington University	250	400	+150
Northwestern University	250	400	+150
University of Pennsylvania	210	325	+115
Vassar College	175	250	+ 75
Columbia College	150	400	+250
Johns Hopkins University	125	105	- 20
New York University	80	160	+ 80

This statement includes, with the exception of Michigan, the 13 most important and 4 other first-grade institutions. In them the former number amounted to 6,581; the revised number amounts to 8,122, consequently an increase of 1,541, or almost 24 per cent.

In the report the University of Michigan, with 800 students studying German; Columbian University, with 108; and Hamilton College, with 45, are not mentioned.

The total, 933, together with the above difference of 1,541, added to the report number of 14,698, makes a present total of 17,192 students of German for 96 colleges and universities.

As these 96 institutions are undoubtedly the largest in the country, not too high a number should be estimated for the others; but as there are four times that number of institutions, a total of 7,800 additional students of German is hardly too optimistic an estimate. The consequent result would be 25,000 students of German for the first-grade institutions of the country, a supposition that can not be very far from the truth.

There are official statistics for secondary schools. During the last seven years, from 1891-92 to 1897-98, the number of pupils taking German increased almost continuously, and justifies the greatest hopes for the future.

According to official statements of the total number of all secondary students, the per cent taking German has been as follows:

	1891-92.	1892-93.	1893-94.	1894-95.	1895-96.	1896-97.	1897-98.
In public high schools.....	10.43	11.92	11.77	11.40	12	12.42	13.25
In private high schools and academies	14.45	15.63	15.25	16.07	17.46	18.84	18.45

This increase is considerable, and doubly remarkable because of its undeniable tendency. The absolute number of German pupils in public and private secondary schools amounted, in 1897-98, to 78,994, and must now be at least 100,000. German has attracted more pupils than French, which numbered only 58,165 pupils for the year 1897-98. Excepting the South, where, especially in Louisiana, French traditions obtain, German is preferred decidedly above French, although in some institutions the case is reversed.

The author is not able to revise further the statistics of the German-American Teachers' Association given above; independent of the data obtained for elementary schools, all material is wanting. The fact that the statistics of the Teachers' Association give for Chicago, for instance, 31,385 pupils of public schools studying German, whereas we learn from competent authority that the number is close to 45,000, proves that the association's figures referring to elementary schools should be in reality very much larger.

The statistics of the Teachers' Association cost very much money, and still more trouble, without producing corresponding results. "The figures," as Director Dapprich, who was chairman of the committee, writes, "can make no claim to being complete, as a large number of school authorities did not send the information requested. If we had received the full number of reports, the total number of pupils studying German would have far exceeded a million."

Although over 1,000,000 out of a total attendance of more than 15,000,000 is not much, it is always a number that can not be considered a "quantité négligeable." The fact is most important that the tendency is toward increase, and that the number of students studying German, especially at higher institutions, is rapidly growing. We can, therefore, say that even now the attendance at German instruction is not unfavorable.

It is remarkable that the progress of German instruction in Canada is parallel with that in the United States. According to the report of the Ontario Educational Association, the number of pupils studying different languages in the secondary schools of Ontario has been as follows:

	Pupils.	Pupils studying—		
		French.	Greek.	German.
1860.....	4,546	1,246	558	-----
1870.....	7,451	2,850	769	a 232
1880.....	12,910	5,464	1,100	859
1893.....	23,301	13,866	1,456	6,288

The progress made by German instruction in Ontario is relatively greater than in the United States, but this branch of learning has a promising future in both countries.

PART III.—THE FUTURE OF GERMAN INSTRUCTION.

This part of the work treats of those agencies, institutions, and persons upon which and whom the future of German instruction in a great measure depends. Libraries, associations, periodicals and other means for the promotion of German instruction come under consideration, as well as the leading teachers and professors, of whom biographical sketches are given. Finally, the effects of close application to Germanic studies and extensive converse with all branches of German science on shaping the international relations between Germans and Americans seemed deserving of the greatest possible attention. It is most fortunate that the present diplomatic representative of the United States in Germany is a man whom the Academy of Sciences, in Berlin, deemed worthy to admit as a member, while the representative of Germany, in Washington, is a man who has considered it his duty personally to study the excellent work done by American universities.

I. "SILENT" UNIVERSITIES.

The best university is the best collection of books.—*Thomas Carlyle.*

Libraries form so important an element of the American educational system that no treatise on any educational subject can ignore them. If America had none other, it would deserve the claim of being a land of culture of the first rank on account of its public libraries, which afford every inhabitant, without distinction of age, rank, or sex, at all times, free of cost, the opportunity to supply the deficiencies of his school education and acquire new treasures of knowledge. Libraries form the most important supplement to the existing school system, and happily minister in equal degree to the wants of all who are not totally ignorant, and have the will to rise to a higher intellectual plane.

The question as to how American libraries affect German instruction is readily answered. A library that is not designed exclusively for the purpose of entertainment is simply inconceivable without German books; it must contain a larger or smaller percentage of them under all circumstances.

Proofs can readily be adduced. More than thirty years since, the renowned English scholar, Professor Huxley, made the following remark.¹

Ask a man who wants to study a subject deeply and thoroughly, be it historical, philosophical, philological, physical, literary, or theological, whether if he desires to master any abstract study—excepting, perhaps, political economy and geology, which are specifically Anglican sciences—he is not obliged to read six times as many German as English books?

It may be that in the meantime conditions have somewhat changed to the disadvantage of German scientific literature, but by no means have they altered the fact that German books are simply indispensable for any kind of scientific work. This is verified by the fact that every year approximately as many German as English and French books together are put on the market.

In the year 1892 there appeared in the United States 4,863 books; in England, 6,254; in France, 13,132, and in Germany, 20,000. The German Empire therefore almost equals in this respect the two English speaking countries and France. Besides, its literary productiveness is decidedly on the increase (in 1898 there appeared 23,739 new books), and, moreover, numerous German books are produced from year to year in Austria, Switzerland, and other countries.

¹ Quoted by Charles Phelps Taft, in his noteworthy lecture "The German university and the American college."

To speak of libraries, therefore, means to speak of institutions in which certain collections of German books are to be found. For this reason a few words must be devoted to the phenomenal development of American libraries.

According to the well-known work published by the Bureau of Education in 1876, *Public Libraries in the United States of America, Their History, Condition, and Management*, there were in this country, in 1793, 35 libraries with 75,000 volumes; in 1859,¹ 1,297 libraries with 4,280,836 volumes; in 1875, 3,682 libraries with 12,376,694 volumes. This number has greatly increased in the meantime. In the year 1891 official statistics² state the number of libraries with more than 1,000 volumes to be 3,803, with 31,167,354 volumes; while in 1900 the Report of the Commissioner of Education shows that the number of libraries of 1,000 volumes and over had increased to 5,383, and the total number of volumes to 44,591,851.

It is a well-known fact that one man alone—Andrew Carnegie—has within a short space of time given \$13,454,865 for the foundation of public libraries in America and Scotland. He says:

The result of my own study of the question, "What is the best gift which can be given to a community," is that a free library occupies the first place, provided the community will accept and maintain it as a public institution, as much a part of the city property as its public schools, and, indeed an adjunct to these. It is, no doubt, possible that my own personal experience may have led me to value a free library beyond all other forms of beneficence. When I was a working boy in Pittsburg, Colonel Anderson, of Allegheny—a name I can never speak without feelings of devotional gratitude—opened his little library of 400 books to boys. Every Saturday afternoon he was in attendance at his house to change books. No one but he who has felt it can ever know the intense longing with which the arrival of Saturday was awaited, that a new book might be had. My brother and Mr. Phipps, who have been my principal business partners through life, shared with me Colonel Anderson's precious generosity, and it was when reveling in the treasures which he opened to us, that I resolved, that if ever wealth came to me, that it should be used to establish free libraries; that other poor boys might receive opportunities similar to those for which we were indebted to that noble man.³

In view of the facts that men like Carnegie are continually providing for the increase of libraries, that in recent times States and communities are attaching great importance to their foundation and improvement (in the year 1891 the State of New York, for instance, increased the number of books in its public libraries to 335,000, and in 1898⁴ to 1,755,000), and finally, that through the efforts of Melvil Dewey, traveling libraries have been introduced, it may be admitted that about 40,000,000 books in public libraries are at the disposal of the American people.

How many out of this large number are either printed in German or translated from German originals? A close investigation of this most interesting subject would make too great a digression.⁵ An approximate estimate can not even be made, as most libraries keep no statistics of the language in which the books that they contain are printed. However, from data that others have verified, personal investigations of the author, and information given by librarians and other competent persons, a few points may be given in answer to the question.

Benjamin Franklin is the founder of public libraries in America. The Philadelphia Library Company originated in the year 1732 and became operative through the members of the Junto Club, each of whom, as well as nonmembers that desired to make use of the library, paid a certain fee (subscription library). The original collection consisted of only English books; in proportion as German literature was

¹ Compare William T. Rhees, *Manual of Public Libraries, Institutions, and Societies in the United States and British Provinces of North America*. Philadelphia, 1859.

² Bureau of Education, *Circular of Information*, 1893, No. 7.

³ *The Gospel of Wealth, and Other Timely Essays*, by Andrew Carnegie, p. 27.

⁴ Compare Schultze, *Free Public Libraries*, pp. 54 and 67.

⁵ Schultze (p. 69) quotes the value of books brought annually from Europe to the United States at 12,860,000 marks. The most, of course, come from Germany.

introduced into Pennsylvania, German books may have been added. On account of the scanty knowledge of German among Anglo-Americans, translations of good German works were frequently introduced toward the close of the colonial period.

To a noteworthy article on "Early influence of German literature in America"¹ Frederick H. Wilkens adds "A list of the translations of German literature that were printed in the United States before 1836," which, without any claim to completeness, contained the titles of 187 works. Besides Goethe and Schiller, we find the names of Campe, Gessner, Klopstock, Kotzebue, L. L. Sturm, J. G. Zimmermann, J. H. Zschokke, Lessing, Schlegel, Wieland, La Motte Fouqué, Chamisso, and Pestalozzi. Kotzebue outrivaled all other authors with 32 works.

In the same proportion that it became customary to study German literature and science in the original German, books were more largely imported. The before-mentioned beginnings of a collection of German books in the Harvard College library no doubt formed the first German book collection of any importance in the whole country. This is at present estimated at about 150,000 volumes.² The German department has besides a specially select seminary library at command. Moreover, Ferdinand Freiligrath's library, a private one, and the German collection of the Boston Public Library, the greatest in the world of its kind, with 700,000 volumes, afford unusually abundant material.

The city of New York can likewise boast of possessing most valuable treasures of German books, that probably may exceed those of Boston and Cambridge in number. Large collections are contained in the Astor, Lenox, Columbia University, and Ottendorfer libraries, and New York University possesses a considerable number of German works. One-half million volumes, of which 200,000 are German, being nearly as many as English, are contained in the Astor Library alone, according to information given the author by the librarian.

The library of the Columbia University contains one of the most important collections of German books, as over 65,000 of the 270,000 volumes are German. Like all American libraries, it is divided into a reference department for general use and the main collection of books. The first, which is located in the large cupola hall, contains about 10,000 volumes, of which probably 500 to 1,000 are German, including the latest edition of Meyer's *Konversations-Lexikon*; the *Deutsche Rundschau*, complete in about 100 volumes; a collection of German classics and prominent works, as, for instance, *Simplicius Simplicissimus*; a number of histories of literature (Brandes, *Principal Tendencies in the Literature of the Nineteenth Century*), grammars, dictionaries, and similar works of reference. Each of the divisions contains the principal works of social and political literature, as *The Capital*, by Marx; historical works on music, mathematics, mineralogy, paleontology, and the different special sciences. Several valuable atlases complete this store.

The library proper contains the best bibliographical works, to determine the old and the new titles. The large lexicons of Heinsius and Kayser, with all supplements; the complete catalogue of editions of German publishers, the *Hinrichs catalogue*, the *Leipzig general German bibliography*, and periodicals, as the *Centralblatt für Bibliothekswesen*, the *Petzold Zeitschrift*, the *Serapeum*, and the *Auzeiger für Bibliotheken Journal*, hardly omit any work of importance. Should it be the case, however, the numerous journals on German literature, as the *Literarische Centralblatt*, the *Göttingen Notices*, the *Journal for Comparative History of Literature*, *Euphorion*, the *Journal for the German Language*, *Herzig's Records for the Study of Modern Languages*, the yearbooks for literature, and many others, afford the opportunity of learning of the existence of any work in question.

For general information on German thought and action all the well-known

¹ *Americana Germanica*, III, No. 2, page 163.

² From a communication from Thomas J. Kiernan, superintendent of circulation.

Konversations-lexikons are at hand, besides such encyclopedias as those of Zedler and Ersch and Gruber, and the large economic technical encyclopedia of Krünitz, in 250 volumes. This division likewise contains the reports of the Berlin and the Vienna academies of sciences, the scientific associations of Saxony, Bavaria, Göttingen, and Prague, and numerous other learned societies in Frankfort-on-the-Main, Halle, Hamburg, Würzburg, etc. The Preussischen Jahrbücher, the Königsberg Alt-Preussische Monatsschrift, the Prussian Provincial Journal, and many popular journals, like Ueber Land und Meer and the Gartenlaube, deserve to be mentioned. The next division contains a most comprehensive literature on mathematics and the natural sciences. No important German journal devoted to mathematics, physics, astronomy, chemistry, agricultural chemistry, mineralogy, geology, zoology, anthropology, or meteorology is missing. We shall mention only as examples Poggendorff's Annals and the Crelle Journal, consisting at present of about 120 volumes. In the following division we find an astonishingly complete collection of transactions of the different parliamentary bodies in Germany, from the Bundestag to the German Reichstag (the official stenographic report), as well as the separate landtags of Prussia, Bavaria, Saxony, Württemberg, etc. Here we pass on to the large politico-juristic division, which is composed about one-third of German books.

The section of statistics and political economy contains all the important works of reference, particularly the statistics of the German Empire, the journal of the Prussian bureau of statistics, the corresponding publications of Bavaria, Saxony, Austria, and Switzerland, the well-known yearbooks of national economy and statistics by Hildebrand and Konrad, Holtzendorff's Yearbooks of Legislation and Statistics, Faucher's Quarterly on Political Economy, the Tübinger Zeitschrift, the publications of the Association for Social Politics, the reports of factory inspectors, Schanz's Finanz-Archiv, Böhmert's Arbeiter-freund, and others, besides the social economic writings of Roscher, Ad. Wagner, Schäffle, Eugen Dühring, Marx, Lassalle, Kapp, etc. Books and pamphlets on the social question, care of the poor, socialism, and kindred subjects are numerous.

In the division for law and government we find the complete works of Holtzendorff, the writings of Ihering, Gneist, Laband, Zöpfl, and Thudichum; Waitz, Deutsche Verfassungsgeschichte; Moser's Deutsches Staatsrecht in 50 volumes; Grünhut's Journal of Private and Public Law, Aegidi's Staats-Archiv, the Journal of Comparative Jurisprudence since 1877, the Criminal Journal, the Judgment Hall, and a large collection of literature on the law of punishment and criminal process. The most prominent names among authorities on Roman law are all represented, as Savigny, Puchta, Glück, Vangerow, and Windscheid. We likewise find the authorities on canon law, Hinschius and Phillips, besides the transactions of the German jurist sessions, the laws of the German Empire and those of Prussia since 1810, the decisions of the superior and present imperial courts, Hirth's Annals, the Journal of the History of Law, and the New Pifaval. To these are added numerous works on commercial law and science, railroads, and state and communal government.

In the next division we find a special collection of works on the woman question and a selection of tales, folk-lore, and legends, literature on geography and geology, anthropology, ethnology, and history. The latter collection is especially large. It contains over 5,000 volumes, including the works of Ranke, Droysen, Von Sybel, Schlosser, and all other noted historians, the well-known universal histories, and a Bismarck collection of about 150 volumes. The Münchener historisch-politische Blätter, in 119 volumes, occupy considerable space, as do also the works of A. von Humboldt, Bastian, Baumgarten, Bülow, the Globus, the Ausland, and the Stimmen aus Maria Laach. There are also many biographies, memoirs, atlases, and much church history matter, as, for instance, Martin Luther's works and the reports of many councils.

The last division is that of the philological seminary, containing about 10,000

German books. Most of the prominent German authors are represented, the most important by several editions of their works; and many works on the history of literature, philology, philosophy, psychology, psychiatry, and pedagogics are at hand. There are, besides, large special collections of Schiller (about 250 volumes), Kant (about 700 volumes), and Goethe (about 1,300 volumes). The Goethe collection is the largest outside of Germany.

The Germanic collection of the New York University numbers about 10,000 volumes, including dictionaries—especially the German Dictionary of the Grimm brothers, grammars, and works on the history of literature. The history division contains the Yearbook of the Historical Collection of the Imperial House of Austria, in 25 volumes, deserving of special mention, as only three copies are extant. The northern division contains the Old Northern Runic Monuments of Scandinavia and England, by George Stephens, a book of interest as representing the life work of a most conscientious investigator. In an article on this collection, recently published by Dr. A. Kluge, he says: "The remarkable collection of journals owned by the university, which numbers about 125 volumes and is considered the best in America, represents considerable capital. Deserving of special mention is the very important Dutch journal, *De Gids* (The Guide), published in Amsterdam since 1837 and enjoying the largest circulation. It is a monthly, devoted principally to belles-lettres, and, under the management of Potgieter and Bakhuizen, in the beginning exercised great influence on the development of modern Dutch literature; even in face of strong competition it continues to hold a commanding position. The work, including the numbers from 1837 to 1897, is bound in 120 volumes. Besides these and many other collections, as the library of the Literarischen Verein, in 218 volumes; the Literarische Anzeiger, in 11 volumes, etc., the university possesses a gem in a separate chromotype copy of the Genaer Liederhandschrift (manuscript of Jena songs), the original of which is in the university library in Jena. There are only 140 copies of this work extant, 30 of which are printed only on one side. According to the list of subscribers, only two copies are in America."

The library of the Cornell University consisted originally of but 14,000 volumes of the former private library of Prof. Charles Anthon, but became an important German collection through the purchase, in 1868, of the celebrated collection of Franz Bopp, the Berlin philologist. The Bopp collection contains many German works on Sanskrit and comparative philology that are not to be found in any other American library. Out of his own means President Andrew D. White formed a collection of German literature, and purchased scientific works on each European visit out of the library fund. In 1871 various German journals and works on mathematics were acquired through an endowment to the library from one of the trustees, William Kelley. Through the acquisition of the celebrated collection of Prof. Friedrich Zarncke, the number of German books was increased at one time by about 13,000 to 14,000 volumes. The largest addition, however, was the gift of President White, who generously presented to the university his library of over 30,000 volumes, about 10,000 pamphlets, and numerous manuscripts. A very interesting account of the most noteworthy editions contained in this collection, selected with unusual intelligence and representing the industry of a generation, is to be found in the *Beiträgen zur amerikanischen Literatur- und Kultur-geschichte*, by E. P. Evans, page 216.

"It is surprising what unique works on German history of culture have found their way to the somewhat isolated city of Ithaca, which possesses among other literature a surprisingly large number of works on magic and witchcraft. One specimen discussed a few years since by the librarian, Prof. George Lincoln Burr, is a facsimile of the original copy of the book, *De Vera et Falsa Magia*, composed by Cornelis Loos at the end of the sixteenth century and for which the author was imprisoned and prosecuted under criminal law. The printing of this

treatise was begun in Cologne in 1592, when the manuscript, fortunately only a duplicate, was confiscated and destroyed. By a happy accident the original of the official reports of the sessions of the inquisition against Dr. Frederick Flache, the companion in suffering of Cornelis Loos, was added to this facsimile. This manuscript, supposed to be lost, was preserved to posterity by Mr. White, he having discovered it in a second-hand bookstore in Berlin, the owner having no suspicion of its value. Since Mr. Burr has been in office he has made the greatest effort continually to increase the German library. As three or four thousand books are added every year, he estimates (January, 1901) the number of volumes at seventy-five to one hundred thousand."

In Philadelphia, the library of the German Association of Pennsylvania, deserves the first mention. It dates back to the year 1817, and though containing only thirty to forty thousand volumes, is a most important mine of German-American literature. Since March 21, 1896, the University of Pennsylvania has possessed a very fine German library. Prof. Dr. H. Schoenfeld thus speaks of it:¹

The library of the late Reinhold Bechstein of Rostock was acquired in bulk through the efforts of Professor Learned, and, with its archival, well-arranged material, represents the nucleus of the so-called Bechstein collection, which has been largely increased and supplemented by the purchase of other valuable works. At present it contains about 15,000 volumes and 3,000 pamphlets, representing the best periodicals, works of reference, and seriate collections, comprising works on philology and literature, dialectology, antiquities, culture, and folk-lore; Gothic, Northern, Old, and Middle High German; rare old prints, like Henssler's folio edition of Hans Sachs, and contemporaneous editions of Luther's works, with the reformer's autograph; a complete series of periodicals devoted to Germanic subjects, and about fifty complete series of publications of learned associations—as, for instance, the library of the literary society in Stuttgart. To these are added the treasures that have been collected in America itself on the subject of American Germanism.

Although German scientific work in Pennsylvania has, in reality, never ceased since the times of Pastorius, the German pioneer, a more decided tone has been given to the study of German since Prof. Samuel Stedman Haldeman, professor of comparative philology at the university from 1869 to 1880, published, among his 32 contributions to philology, his article on the German vernacular of Pennsylvania, in the transactions of the American Philological Association (1869-70). With this publication begins the study of German dialectology in America. In the words of Learned, "It is a pioneer study in American dialectology and the comparative philology of German dialects." At the same time another excellent German scholar, Oswald Seidensticker, laid the foundation of the history of German-American culture—the history and literature of German pioneers in America. A list of his numerous writings on this subject, that deserve to be studied by every educated German, are contained in a small book published on the occasion of the opening of the Bechstein Germanic Library.²

Besides this library, the following collections are accessible to any inquirer from the vicinity: The library of the Historical Society of Pennsylvania, with a fine collection of individual Germano-Americana; the library of the Philadelphia Turngemeinde, the works of which refer principally to the history of athletics in America; the collection of the Mount Airy Lutheran Seminary, which contains many documents on the development of Lutheran communities and schools in America; the collection of Judge Samuel J. Pennypacker, containing many German editions published in Pennsylvania in the eighteenth century; the collections of the Lutheran seminary in Gettysburg and the Moravians in Bethlehem and Nazareth; finally, the collection already mentioned of Mr. Abraham A. Cassell in Harleysville, Montgomery County.

Whoever, therefore, desires to devote his attention to German-American studies

¹"The importance of the University of Pennsylvania for German culture and history." In the *Pedagogical Record*, vol. 38, 1896, No. 10.

² Opening of the Bechstein Germanic Library, University of Pennsylvania, 1896.

must seek his material in Philadelphia. In New York and Boston a far greater number of English translations and books imported from Germany are to be found.

In Baltimore there were in the beginning of the eighties several libraries, including the magnificent Peabody Library, numbering over 200,000 volumes, and the Johns Hopkins University library, with 30,000. At that time, Prof. Herbert B. Adams, whose labors in so many directions have contributed to the prosperity of the university, initiated the effort to acquire the library of his deceased teacher at Heidelberg, Prof. John Caspar Bluntschli, for the university. As the well-to-do Germans of Baltimore considered the advancement of the Johns Hopkins a duty of honor and shared the desire to raise the library to a good standing, they succeeded, owing to the efforts of Professor Raddatz, professor of German at the Baltimore City College, in raising the necessary fund by subscription. On December 20, 1882, an impressive celebration was held in the large hall of the university, after which Col. F. Raine, in the name of the donors, presented the Bluntschli library to President Gilman. In his reply the latter remarked that America was indebted to Germany for three things: I. The many works contributed in the different branches of science. II. The impulse given to the promotion of education. III. The many excellent men that have come to America, so many of whom have taught in American schools. President Gilman closed his effective speech with the words, "Ad illuminandas gentes, Germania."

To speak of the other addresses would lead us beyond our scope. One fact, however, is incontestable—though the Bluntschli library is small (3,000 volumes), it is very valuable. Moreover, it has in the meantime been considerably enlarged. In 1834 the widow of Dr. Francis Lieber presented her husband's works, together with many valuable unprinted manuscripts, to the library. In 1887 the Swiss Government made a larger gift. In recent years the German library has received an annual sum of \$1,000, presented by a German-American of high standing on condition that his name be withheld.

The University of Michigan furnishes a classic illustration that many of the much-vaunted State universities suffer from the same difficulties which the Johns Hopkins encountered, viz, insufficient means for forming a German library. In December, 1885, Professor Calvin Thomas, at that time assistant professor of German at that university, addressed the following interesting letter to Dr. Hermann Kiefer, of Detroit. Only the introduction and conclusion are omitted:

Our State university is suffering greatly from the need of a Goethe library, and the question I would ask is this, Whether, if the many wealthy and educated Germans of this State were acquainted with the conditions of the case, they might not be expected to supply this need? I need not say much of the importance of Goethe in the intellectual life of modern times. Every year increases the interest in the great German poet. An immense amount of literature relating to him has already come into existence, and this literature is constantly and rapidly increasing. To quote the words of Hermann Grimm: "From now on there is a science called Goethe." How deeply, then, is the fact to be deplored that of this Goethe literature the library of the great State university of Michigan possesses next to nothing. Moreover, unless assistance comes from without there can be no speedy improvement of this condition in the future. The common belief is that an educational institution, supported by the large and rich State of Michigan, is entirely relieved of all necessity of private support. This view is, unfortunately, unjustifiable. The total amount which the library committee has been able to expend for "German literature" during the last ten years is \$400 in round numbers. That is an average of \$40 a year. Anyone who knows anything at all of the demands of a large library realizes at a glance that nothing can be done with such means. Under such conditions it can be understood why we have not been able to procure a Goethe collection, for with the little at our command we have been obliged to provide for all German literature from the time of the Middle Ages.

The above is not to be construed as though I design to accuse the State of illiberality. Nor should there be any suspicion of mismanagement of the money

appropriated. Justly and conscientiously we do what we can, but with \$10 a year very, very little can be effected. It must be taken into consideration that the library possesses no particular income. Like the university, it is, for the most part, supported by special appropriations of the legislature; the "general fund" of the institution does not suffice to pay the daily necessary expenses. What happens when the legislature seems to act rather liberally toward us? Last winter the members in Lansing appropriated \$10,000 for the university library. This has every appearance of being a considerable amount. At all events, I do not think that much larger appropriations are to be expected in the future. Now, let us see what action was taken. The sum mentioned is not intended for one year, but for two years; consequently, \$5,000 for one year. Of this amount the medical and law departments receive \$1,500; \$1,200 are spent for binding and subscriptions to periodical literature. The remaining \$2,300 are divided among about twenty-three professors of the academic department, each of whom has an equal right to have the wants of his own branch satisfied. One of these twenty-three is the professor of "modern languages," by which are understood French, German, Italian, and Spanish; other modern languages are usually ignored. From this you see what an insignificant part of the \$10,000 appropriation is and can be applied for German literature, and still no injustice has been committed.

The possible rejoinder may be made that every other department of the library is as poorly provided for as that of German literature; why, therefore, complain? Even were such the case, there would be great reason for complaint, in my estimation. But such is not the case, because so many other departments have been supported by private gifts. In 1870, for instance, Mr. Philo Parsons, of Detroit, enriched the department of political sciences by the gift of the valuable library of the late Professor Rau, of Heidelberg (about 4,000 volumes and 5,000 pamphlets). During 1883-1885 Mr. James McMillan, of Detroit, gave \$7,000 for a Shakespeare library. Another gentleman, whose name is not to be published, presented \$3,500 to the university for the purchase of historical works. Another anonymous gift of \$300 has just been received by the department of English literature. Not long since the mathematical division received \$500 from the well-known German manufacturer, Mr. Hegeler, of LaSalle, Ill., and so on, for this chapter is by no means completed. The department of German literature alone seems to have gained no such friends. Shall this reproach continue to exist? If a practical man should ask what we really want, my answer is as follows: We want about \$6,000, \$1,000 to be spent at once for the beginning of a Goethe library, and the rest to be loaned at interest, the yearly income from this capital to be applied to the completion of this library. The fund might be called "the German-American Goethe fund." By a Goethe library I understand, of course, in the first place, the works of Goethe, i. e., the different editions of his works, his correspondence, etc.; secondly, biographical, critical, and explanatory matter; thirdly, historical, mythological, and other material that throws any light whatever on the writings of Goethe (there are, for instance, 1,500 volumes of Faust literature); fourthly, illustrations of Goethe's works in copperplate and steel engravings, etc.; fifthly, after the most necessary books of the above-mentioned classes have been procured, our library should include the works of other authors (such as Herder, Schiller, the Romanticists) who stood in intellectual relation with Goethe and may be considered precursors, cooperators, opponents, or continuators of his intellectual action. In this way the library would gradually develop into an ample collection of the most important literary treasures of Germany.

Is it possible for any part of this air castle to be built upon solid ground? I apply, first, to Germans, because in reality it is a German affair. From whom else should help come? In the execution of such a design German patriotism can erect a beautiful memorial for all time. But why should this memorial be given to Ann Arbor? With the prevailing American sectarianism and the consequent division of higher educational interests, it seems to me that the Germans of Michigan have every reason to stand by the State university. More than 1,000 German students have studied there. It is the only institution in the whole Northwest where German young men and women can receive intellectual food to some extent similar to that received in the large universities of Germany. Originally this university was as far as practicable modeled after the German standard. *

Finally, in order to show that the plan which I have outlined is not a thing unheard of, I mention the fact that not long since the German citizens of Baltimore, or rather some among them, bought the large library of the renowned Professor Bluntschli and presented it to the Johns Hopkins University.

The letter was published in the German papers of Michigan and attained its purpose. The Goethe library now numbers about 1,000 volumes. Thus Professor Thomas was enabled to begin his special study of Goethe, which he has since con-

tinued with much success. Moreover, it proves that not only, as the poet says, evil deeds must ever produce evil, but that the same can be said of what is good.

As a counterpart of the measure of Professor Thomas, we may cite the following appeal, published last year in the German press of St. Louis by Professor Otto Heller. It reads:

GERMAN STUDENT LIBRARY.

DEAR SIR: Upon my acceptance of the chair of the German language and literature at the Washington University I recognized, seven years ago, that one of my most immediate and most important duties was to acquire as complete a German student library as possible for the university. Conditions were such that for a long time I could not count upon any contributions worthy of mention from the university fund, and so was obliged to promote the undertaking partly by the efforts of the German public and partly by the receipts from public lectures which I have delivered every year since 1894 for this purpose. With a feeling of gratification I thank the Germans of St. Louis for their attendance at these lectures, which alone enabled me to lay the foundation for the large library contemplated. In one, of course, rather limited branch our German department library contains a fine selection of scientific works and reliable works of reference; but only a very modest beginning has been made.

On account of the unpropitious times, which have brought so many similar efforts to a standstill and prevented the agitation of a new project, I have withheld from making a public appeal until now.

In the meantime the academic study of German in the United States has attained not only an estimable, but a brilliant position. At Harvard, the University of Pennsylvania, the University of Chicago, the Northwestern University, and all others situated in localities with a rather large German population German libraries have been acquired at a great expenditure of money, which, in my estimation, are calculated more than all articles of German scholars in English periodicals to reconcile within the quiet rhythm of time the violently antagonistic minds of two leading nations.

Since I have finally resolved, with your kind cooperation, to plead for general support for the realization of my plan, I think that I am justified in giving a full explanation of the purpose of the large German library which I have in view. The library is intended to furnish students, especially those of German extraction, with a tangible means for the systematic study of the German language and literature from the beginning to independent research. It is, furthermore, designed to lighten and oftentimes even to make possible the scientific work of authors and scholars within this district, and thus and in other ways help preserve German culture in our midst by making an important educational instrument, German literature in all its branches, accessible to every inquiring mind.

The sum of money required is considerable. I also know that German charitable institutions, the German stage, and many other praiseworthy objects have well-founded and prior claims for support, and I have not the least thought of depriving them of public assistance. Still I hope that I do not deceive myself when I believe that in their position, which exposes German-Americans to ever-increasing attacks, a greater spirit of sacrifice among individuals will promote the execution of my project.

In this hope I hereby request all who encourage this undertaking to forward their contribution of whatever amount, from 50 cents upward, to me as soon as possible, or to send it to the office of the Westliche Post for me. As soon as received the money will be deposited in the university treasury and the amount will be published weekly in the columns of the Westliche Post.

The name of each contributor and the books purchased by his gift will be noted on specially printed tickets. The university office, in union with a committee of German-American citizens selected by the first fifty contributors, will control the fund.

Professor Heller earned by this appeal only \$350.

Chicago possesses several important libraries. On June 1, 1900, the Chicago Public Library contained 21,813 German volumes, not including several thousand bound volumes of German periodicals and works of art and an indefinite number of pamphlets. Since then about five or six thousand volumes have been added, so that the entire number of German books is at least 25,000.¹

¹ The author received written information on this point from Mr. E. F. L. Gauss, assistant librarian of the Public Library, in February, 1901.

There are, in addition, the two university libraries. That of the University of Chicago is quite large.

The Rudolf Hildebrand library of the Stanford University has already been referred to.

With the best intentions it was impossible to ascertain the size of German libraries in other cities within the limited space of time at the disposal of the author. Moreover, such an investigation is hardly practicable without the collective work of an association interested in the purpose.

Independent of the large German libraries in all important cities and higher educational institutions, there are a small number of German associations that support libraries in which German books of course predominate. Several such associations have already been mentioned, but in the discussion of associations for other than purely literary purposes. There still exist, and formerly there were many more, German reading clubs, that in their way adopted the Franklin plan of subscription libraries. Such, for instance, are the German Literary Society of Morrisania (New York), and the German Reading Club, of Pittsburg. In the beginning of the year 1897 the German library of the latter numbered about 12,000 volumes.¹

The Belleville Public Library, the origin of which may be likewise traced to a German reading club, has a very interesting history, given in its seventeenth annual report of June 1, 1900. Under the direction of Dr. Anton Schott, sixteen German immigrants met and founded the German Library Society of St. Clair County. Each paid \$3, and with the accrued amount a "library" of 346 volumes was collected the first year. As the Germans of Illinois have always been good patriots, the first book purchased was the first volume of Sparks's *Life of Washington*.

As we can not refer to the interesting details of the development of this library, we mention only the following: In the year 1883 the library was estimated to contain about 9,000 volumes, partly English and partly German. It was then taken charge of by the city, to which it was presented by the library society. Since that time the number of books has risen to 30,000, and the German works have likewise been increased in number.

Only large public institutions and corporations are in a position to support a library of any importance. Small private "reading circles" are suitable for small villages and rural districts alone. Moreover, the lack of any kind of a library is of itself proof that an institution has no claim to great scientific importance. According to the Report of the Commissioner of Education for 1897-98, of the 39 largest institutions in the South, 12 possessed a library with fewer than 5,000 volumes: 7 possessed a library containing 5,000-10,000; 10 possessed a library containing 10,000-15,000; 4 possessed a library containing 15,000-20,000; 5 possessed a library containing more than 20,000. The University of Texas, with 35,000 volumes, is included in the above.

However, the disposition is manifested in the South to remedy this cardinal defect as quickly and thoroughly as possible.²

II. ASSOCIATIONS AND PERIODICAL PUBLICATIONS FOR THE PROMOTION OF GERMAN INSTRUCTION.

The Modern Language Association, as we learned in the section on historical development, deserves to be mentioned first among the societies for the promotion of German instruction. At the annual meeting held in the University of Nebraska, in Lincoln, December, 1898, its purpose was amply defined by C. Alphonso Smith,

¹ German Reading Club. Yearbook and supplement to the club catalogue. Pittsburg, 1897.

² The Sewanee Purple. The University of the South, Sewanee, Tenn. Midwinter number, 1901, page 9.

president of the central division. Among other things, he said: "The purpose is by united efforts to establish a center of correct information for the settlement of questions relating to the modern languages and literatures. We wish to make accessible to every advanced student and to every teacher of the modern languages the best ideas attainable in or about his time."

He then referred to the example of Noah Webster, and explained that this excellent scholar could not attain a result corresponding to his thought and energy because he was not acquainted with the best investigations of his time. Webster (who died in 1843) lived at a time "when Jacob Grimm had laid securely the foundation of historical grammar, when August Wilhelm von Schlegel had laid the foundation of Sanskrit philology, when Franz Bopp had laid the foundation of comparative grammar, and when August Friedrich Pott had laid the foundation of scientific phonetics; but Noah Webster cared for none of those things."

It is accordingly evident that there is a necessity for a society with the purpose in view of acquainting its members with all the current proceedings in their different branches of knowledge. In what way the Modern Language Association has taken an active part in educational reform, and how it has thus assisted German to attain the position due to it in the curriculum of higher educational institutions, has been amply explained. The action of the society must therefore be considered exceptionally beneficial.

The total number of members is about 1,000, including a considerable proportion of Germans and German-Americans. The German minority is by no means so great, however, but that it was able to elect a president of its own choice. If the main division of the association, with about 550 members, 25 per cent German, elected a German—Prof. Hans Carl Günther von Jagemann—to assume its direction, positive reasons alone could have been their motive. Nativistic narrowness does not therefore exist in these circles. If another proof were needed it is furnished by the "Kommers" ("smoker"), which, according to early German custom, was held at the seventeenth annual congress in New York at the close of December, 1899. Of 11 songs sung on this occasion, 3 were Latin, including the *Gaudeamus igitur*; 3 English, 3 German, 2 French, and 1 was "mixed," namely, partly German and partly English.

The scientific lectures delivered at every annual meeting are not all of equal value; still many are worthy efforts. The full text of only the latter is given in the proceedings of the association, which appear annually. The Modern Language Notes, likewise published by the association, are of less general interest, though they are indispensable for the preservation of data relative to the development of German instruction.

The National German-American Teachers' Association, whose work covers a period of thirty successful years, ranks next in order to the Modern Language Association.

In April, 1870, the following appeal was published to the teachers and friends of the schools:

German teachers and German-American schools lack union and combined action, and still on them chiefly is based the hope of the preservation of the German language, custom, and thought—the hope of the protection of German culture. We, the undersigned, are convinced that the necessity for a general organization of German teachers of the Union has long since been felt by the majority, and that the difficulties in the way of effecting it have caused anxiety, as the local teachers' associations have taken no part in the matter and offered no support.

We have therefore resolved to initiate the formation of a general teachers' union by annual meetings, after the fashion of German teachers' days. These would offer points of contact, the first essential toward a permanent union.

We define the purpose of such meetings to be: The formation of general pedagogical efforts, the support of the mission of the German element in behalf of the

history of culture, especially the extension and further development of specifically German-American schools, and in connection with them the defense of the interests of their teachers.

As the beginning must be made by some one, we hereby assign the first German-American general teachers' day for the 1st to the 3d of August of this year, in Louisville, Ky., and invite German teachers throughout the Union to participate in large numbers, adding that all other friends of the cause who feel a lively interest in the preservation of our native language and are not indifferent as to whether the second generation of immigrants are estranged from German thought and feeling or not, are heartily welcome. The teachers and friends of the schools in Louisville are ready to form a local committee which will make the necessary arrangements to provide the attendants with cheap or free lodging and reduced fares on railroads and steamers.

We furthermore request our honored colleagues to prepare such lectures and theses for discussions as will promote the above-mentioned purposes; the announcement of these should be sent to the provisional business committee through E. Feldner, Detroit, Mich., not later than June 1, so that the program may be arranged and published in time by the said committee.

The Louisville local committee (address W. N. Hailmann) will publish in a short time all information concerning its arrangements.

The committee formed for the organization of the first general German-American teachers' union is composed of: J. Bengel, professor at the Normal School of Ypsilanti, Mich.; Ed. Feldner, director of the German-American Seminary, Detroit, Mich.; W. N. Hailmann, director of the German-American Academy in Louisville, Ky.; Dr. Hopp, director of the German-English School in Yonkers, N. Y.; J. Illian, teacher at the German-American Seminary in Detroit, Mich.; L. R. Klemm, teacher at the German-American Seminary in Detroit, Mich.; J. C. Knapp, director of the German-English School in New Albany, Ind.; K. Knortz, professor at the High School in Oshkosh, Wis.; E. Pollmar, teacher at the German-American Seminary in Detroit, Mich.; H. Reffelt, teacher in Hoboken, N. J.; A. Schneek, teacher at the German-American Seminary in Detroit, Mich.; F. L. Soldan, professor at the High School in St. Louis, Mo.; F. R. Schunemann-Potte, speaker of the Secular League in Philadelphia, Pa.; W. Steffen, professor at the St. John's College, Annapolis, Md.; Dr. Sonneschein, rabbi of the Reformed Israelites in St. Louis, Mo.; F. Mundemann, teacher at the German-English School in Yonkers, N. Y.

The organization meeting was held in Louisville, August 1, 1876. As might have been expected, its proceedings were all of a preparatory nature. Lectures were delivered by A. Schneek, Detroit, on the subject, *A Parallel between German and American Education*; by P. Engelmann, Milwaukee, on *School Books*; by H. Reffelt, Hoboken, on *Obstacles to German Instruction in America*; by J. C. Knapp, New Albany, Ind., on *The Agitational Task of German-American Schools*; by Karl Knortz, Oshkosh, Wis., on *German Language Instruction*; by F. L. Soldan, St. Louis, on *Necessary Modification of German Methods*. Besides these, a speech in English was delivered at the general meeting on *The Mission of the German-American School*.

The officers were Messrs. E. Feldner, Detroit, president; W. N. Hailmann, Louisville, vice-president; L. R. Klemm, Detroit, first secretary; W. H. Rosenstengel, St. Louis, second secretary; F. Thurm, Williamsburg, N. Y., third secretary, and J. C. Knapp, New Albany, Ind., treasurer. The list of members contained 116 names, 21 being those of women.

The result of the meeting is thus given by W. N. Hailmann:

The German teachers and friends of schools in America met in Louisville, Ky., from August 1st to 5th. This was the first successful attempt to assemble and unite the scattered preservers of the German language and German thought and feeling in our adopted fatherland, and no one whose pleasure it was to attend the conferences left without being convinced of the far-reaching influence and importance of this opportune undertaking. By the proceedings of the united teachers the professional self-consciousness of each was strengthened; everyone returned home with renewed zeal for the fulfillment of his duties, whose dignity and significance he saw in a clearer light; everyone left with the strengthened consciousness that he was a powerful factor in a high mission, the elevation of his fellow creatures in general and those of America in particular; everyone firmly resolved

to contribute to the suppression of all narrowness in his profession, based upon traditional or acquired claims or on the ignorance of state or church.

The first positive effect of this congress was the foundation of a pedagogical monthly, the *Amerikanische Schulzeitung*. Its publication was intrusted to a former teacher, the late publisher, H. Knöfel, of Louisville, and W. N. Hailmann, likewise a resident of that city, was chosen editor. What this periodical, the name of which was changed later to *Erziehungsblätter für Schule und Haus*, gradually accomplished under the management of Hailmann, Kleinm, and Grossmann till Dr. H. H. Fick, of Cincinnati assumed the editorship can be ascertained by examining the numbers at hand. Besides the chief editors appointed by the publishers the following gentlemen were chosen by the association as assistant editors: Messrs. Rosenstengel, Müller, Keller, Klemm, Schuricht, Lohmann, Eckoff, Fick, Rink, and Geppert.

The association, as well as its organ, acknowledged the following concise and sensible statement of purposes:

- I. The care of the German language and literature, together with English.
- II. The introduction of natural (developing) methods as striven for by German pedagogics into German-American schools.
- III. The education of truly republican citizens and the defense of the intellectual and material interests of German teachers.

In this sense the foundation of the Normal Seminary, previously mentioned, was undertaken by the union. Despite unremitting agitation and, with the exception of the year 1888, annual meetings in different places (the one held in Cleveland, 1890, was visited by the United States Commissioner of Education, Dr. Harris, who delivered an address), the association has not been able to effect a firm union among German teachers. In his lecture on the history of the association, delivered on its twenty-fifth anniversary, July 3, 1895, in Louisville,¹ Dr. Fick attributed this failure partly to its loose organization, partly to the increasing indifference of German-Americans, and partly to obstacles of a partisan nature. In so far as the last reason was justified, it could not have been better counteracted than it was on the thirtieth anniversary of the foundation of the association, when Professor Learned, a thorough Anglo-American, was elected president. This action formed an unusually suitable counterpart to the choice of a German president by the Modern Language Association. Could the idea of intellectual cooperation of Germans and Americans find a more concrete expression than in these purely spontaneous manifestations of will on the part of the associations in question?

From the year 1899 a new and to all appearances more hopeful era of the association begins. Its present finely equipped organ, the *Pedagogical Monthly*,² a journal devoted to German-American education and since December, 1899, the organ of the National German-American Teachers' Association, appeals not only to German teachers, but is calculated to attract professors of colleges and universities. The editor is Max Griebisch, teacher at the National German-American Normal Seminary, and Professor Learned has personally undertaken the direction of the "division of higher education." As this worthy journal reaches about 12,000 interested persons directly, success, it seems, must follow. The list of contributors is very large and represents not only the most important States from Maine to California and from Michigan to Texas, but Canada also. The association now numbers about 1,200 members.

Besides these two associations of national importance, others restricted to a definite field of action and, consequently, the more effective, e. g., the "German societies" of the different universities, which exist in many places, deserve to be

¹ Published in Nos. 300 and 301 of the *Erziehungsblätter*.

² The Herald Company, Milwaukee, Wis., publishers.

mentioned. Harvard and Vassar each has such a society, and it seems as though they will continue to be founded in the interests of the German departments wherever such exist. It is, moreover, intended that the different German societies shall have direct intercourse with one another, in order that, similarly to the societies which have a common purpose in the German high schools, they may be informed of one another's work and action and perhaps meet periodically on special "days."

These German societies are a part of student life that has yet to find its way into America. They make use of the German language, German lectures are held, German songs are sung, and a few of them give their "Kommers" ("smokers") at the close of the scientific work, so that one might believe himself transported to Heidelberg or Jena. This explains why so many of the professors who have studied in Germany take an active part in the society life, however little their professional duties may have to do with German instruction.

One of the most flourishing societies of this kind is the Deutscher Verein of Columbia. According to its constitution, its purposes are "the study and appreciation of the German language and literature, in speech as well as in writing; the discussion of all contemporaneous events in Germany; the promotion of public German lectures at Columbia University, and the social affiliation of those who are interested in German." Only teachers and students of Columbia can be active members; the number of honorary members is unlimited. The first thought of admitting as extraordinary members any who, though not members of the university, were nevertheless interested in the purposes of the society, was not carried out. Students are only admitted on condition that they understand enough German to follow the proceedings conducted in the German language.

Mention must be made that, besides all the teachers of the department, several other professors who, like most of the teachers at Columbia, studied in Germany, became regular members. Among this élite group of German students a German idealism was aroused, which White deservedly appreciates in his "Message of the nineteenth to the twentieth century."

It would cause too great a digression to mention all the lectures and proceedings of the society since its organization in the fall of 1898. During the season of 1900-1901 Dr. F. W. Holls, of New York; Professor Learned, of Philadelphia, and L. Viereck, of New York, delivered lectures, whilst those of Professors Jagemann and Schilling, both of Cambridge, are still pending. The lecture of Professor Learned cited most important data; the lecture of L. Viereck treated of the historical development of German instruction in America. The remarks of Dr. Fred W. Holls, of New York, were particularly interesting. Having been secretary of the American delegation to the Peace Congress held at The Hague, he spoke of the significance of this event for the development of international law. Besides the lecturer, two other members of that congress belonged to Columbia, viz, President Seth Low and Captain Mahan. The students were filled with no little pride at these international relations of their alma mater.

The society possesses a large clubroom in the west hall of the university. One wall is decorated with a magnificent black, white, and red flag, which was presented to the society. The other walls are lined with cases to contain the books and periodicals of the society. These are still modest in number, but are to be considerably increased, as a benefit play given in the German theater of New York realized a large amount, which is to be devoted to the purchase of German books. It must not be forgotten that students are recommended to see German classical plays after they have read them and that they willingly follow this counsel. In April of 1901 the German ambassador, Dr. von Holleben, attended a society evening.

As far as can be ascertained the two German associations of the Northwestern University—the German Gesellschaft and the Literatur Verien—may be considered

the largest and most successful of the kind outside of the great metropolis of the Empire State. They were organized by Prof. Henry Cohn, a man prematurely cut off from a life of influential action. He understood how to imbue them with a vigorous and varied life, so that there need be no fear felt for their continuance. As before stated, the Literary Society was founded in 1893; it therefore belongs among the oldest organizations in question.

In the account given of the university mention was made of the arrangements that existed in former years in the departments of art and literature. An evening entertainment given in January, 1901, by these associations was fully described in the *Illinois Staats Zeitung* of January 31, of that year, by the well-known journalist, L. Zwanzig. We quote the following:

The evening entertainment which I have mentioned was attended by many students of both sexes, a large number of professors of other faculties, the trustees of the university, with their ladies, and a number of invited guests. The programme consisted of recitations, songs, and a representation of the highly dramatic scene between Gen. Octavio Piccolomini and his son Max, from the last part of Schiller's trilogy *Wallenstein*. * * * The language of the Americans on the stage of the music hall was satisfactory in every way, and even astonishing. We must not forget that the pronunciation of German on such occasions is difficult for Americans. I was agreeably surprised at the perfect understanding of the works on the part of the young men, who thoroughly appreciated the thought portrayed.

The teachers of German at the Northwestern University adhere to the principle maintained by the greatest of all German novelists, Gustav Freytag, that the knowledge of languages is the best help for science, in order to understand the highest that man can comprehend, the souls of nations. For this I accord them my deepest appreciation and admiration. German-Americans may be proud that German instruction is in charge of such excellent scholars, to whom liberal science is "the high, heavenly goddess," and not "a fine cow that provides them with butter."

But I desire to express the pleasure which my visit among them afforded me, not only to the teachers but to the students. The students of to-day are the teachers of to-morrow. The 400 students of German at the university in Evanston form a respectable fraction of the element called to leave its intellectual stamp on the North Americans of the twentieth century. May science be free and holy to them, and may they carry out the thought of their teachers when they themselves shall be guides, leaders, and counselors of their nation, and exert a directive and molding influence on its history.

Thus far the words of the report; finally, it must not be forgotten that, at a former time, the *Deutsche Gesellschaft* felt called upon to lend a helping hand to the needy German poet, A. Mels, on his death bed. The recitation of his well-known comic Heine's *junge Leiden* (Heine's early sufferings), given by the Berlin actor, Nelich, April 14, 1894, under the auspices of the association, realized the sum of \$120, that contributed much to making his last hours pleasanter.

German Turn- and Gesang vereine, German societies and other associations which, according to their statutes or occasionally, as opportunity offers, devote themselves to a greater or less cultivation of the German language and the promotion of German instruction, athletics, and singing, are very numerous. Mention has already been made of athletic associations in this respect. However, it is beyond the scope of this work to give a special account of these kinds of associations. The same may be said of the Philadelphia German Centralbund and the different German historical societies of Baltimore, Milwaukee, and Chicago, although their work contributes not a little toward furnishing valuable historical data for German instruction.

The two quarterlies that have been published since 1897, the *Americana Germanica* (appearing since January, 1897) and the *Journal of Germanic Philology* (appearing since April, 1897), must not, however, be overlooked. The former says:

The appearance early in the current year of two quarterlies, both devoted to Germanic studies and both published and subsidized in America, and, thus far at least, receiving their contributions from scholars in America, is a reasonable

cause of surprise, and at the same time an adequate reply to those who have been wont to complain that the Germanists in America are not keeping pace in productive activity with their colleagues in the domains of Romanic and English philology. The explanation of this apparently sudden manifestation of new life is not far to seek. For more than a decade the *Modern Language Notes*, and the *Publications of the Modern Language Association of America* have been the main avenues of publication for the three great departments of Romanic, Germanic, and English philology (the last having been severed from the Germanic group, and regarded as a separate department, because of its cultural importance). While these publications, together with occasional studies in the *American Journal of Philology* and the *Proceedings of the American Philological Association*, have done much to stimulate production in their various fields, none of them could, without a serious break with its traditions, narrow down its scope and devote itself to any one particular department. The various university series begun in recent years have contributed their part toward meeting the demand for special publishing facilities until more specific journals should arise to occupy the field. It is an open secret, that for four or five years as many different Germanists in America have conceived (as it seems, quite independently, only emulating the example of German scholars beyond the Atlantic) the idea of establishing some form of journal for the promotion of Germanic studies in this country.

Thus the two new journals are natural and timely evolutions, having in each case a clearly defined point of view and plan of operation, and having so constituted their editorial corps as to include most of those who were themselves contemplating similar enterprises, thus securing cooperation and good will, which must augur a new and better epoch in the history of Germanic studies in America.

The *Journal of Germanic Philology* is edited by Gustav E. Karsten, University of Indiana, with the cooperation of Albert S. Cook, Yale University, for the department of English; Horatio S. White, Cornell University, for the history of German literature; George A. Hench, University of Michigan, for the historical grammar of the Germanic dialects; Georg Holz, University of Leipzig, Germany, European coeditor. In the language of the editors:

The journal is devoted to Germanic philology in the broader sense of that term, including the study of literature as well as that of language, thus embracing English, which occupies an important place in the scope of the journal. Thus the *Journal of Germanic Philology* and the *Americana Germanica* enter the Germanic field from quite different directions, the former taking English and German in general as the main goal, the latter emphasizing the literary, linguistic, and other cultural relations of Germany and America; the former soliciting foreign contributions on the general field of Germanics, the latter accepting American contributions on the general field, but soliciting foreign articles on the relations of Germany and America, but in both language and literature and in all the periods. Both journals are academic in character and aim at scientific treatment of the material which they publish; both accept articles in English or German and have an international circulation.¹

The *Americana Germanica* is a most excellent journal, which promotes the cause of German instruction the more effectually as its able articles not only influence professional circles, but are read by interested parties in the educated circles of both hemispheres. The editor is Prof. Marion Dexter Learned, University of Pennsylvania. The contributing editors are: H. C. G. Brandt, Hamilton College; Hermann Collitz, Bryn Mawr College; Daniel K. Dodge, University of Illinois; A. B. Faust, Wesleyan University; Kuno Francke, Harvard University; A. Gerber, Earlham College; Julius Goebel, Leland Stanford Junior University; A. R. Hohlfeld, Vanderbilt University; H. M. Schmidt-Wartenberg, University of Chicago; Hermann Schoenfeld, Columbia University; Calvin Thomas, Columbia University; H. S. White, Cornell University; Henry Wood, Johns Hopkins University.

The prospectus of the journal states:

The purpose of the periodical is to furnish a distinct medium for the publication of results obtained from the comparative study of the literary, linguistic, and other cultural relations of Germany and America, to unite the efforts already made in this domain, to stimulate new researches on both sides of the Atlantic,

¹ From an editorial in *Americana Germanica*, I, No. 3, pages 105 and 106.

and to build up in the course of the years a series of studies setting forth the history of German culture in America.

The periodical will include in its scope the following specific subjects:

1. The literary relations of Germany and America—and England as far as it has to do with these relations—comprising (a) German literature written in America; (b) German literature reprinted in America; (c) American translations of German literature; (d) influence of American literature in Germany.

2. The linguistic relations of Germany and America, comprising the Germanic dialects of America: (a) German dialects (Dutch, Platt, Palatine, Thuringian, Saxon, Bavarian, Swiss); (b) Scandinavian (Danish, Swedish, Norwegian, Icelandic); (c) English only so far as influencing or influenced by the other Germanic dialects.

3. The cultural relations (exclusive of the literary and linguistic) of Germany and America, particularly folklore, manners, customs, industries, and arts.

4. Articles on the general field of Germanics written in America.

The journal, which at present forms four volumes, has, according to this plan, published a series of valuable articles. Some have been quoted in this work; others were omitted only for lack of space. A number have been published separately. The undertaking met so pressing a demand that its extension led to the earnest consideration of an American-German publication fund. Details of the subject will be given in the next section.

Besides the more lengthy articles, criticisms of books, advertisements of recent publications, and editorials on all subjects relative to the matter in question, form the chief contents of this interesting journal. As a matter of course, it likewise contains articles on promoting German instruction, though they are not so numerous as in the official organ of German-American education, the *Pedagogical Monthly*. The "division for higher education" is directed by Professor Learned.

III. SPECIAL INSTITUTIONS AND ENDOWMENTS FOR THE PROMOTION OF GERMAN INSTRUCTION.

It is a noteworthy fact that friends of the study of German in American schools have not been satisfied with the official action in this direction referred to in previous sections, but have competed among themselves to promote the cause of German instruction further by special agencies and endowments. As a result of this praiseworthy zeal, we give the following heterogeneous list, all of which, nevertheless, tend to the same end:

I. The Germanic Museum, at Harvard.

II. The German Publication Fund.

III. The German theatrical productions given as benefits for the above and other Germanic purposes.

IV. The endowments at different universities: (a) for fellowships or scholarships to students of German; (b) for professorships in German; (c) for German books.

In March, 1897, the following general appeal was sent out from Cambridge:

THE NEED OF A GERMANIC MUSEUM AT HARVARD.

Not so very long ago the study of German in this country was valued chiefly as a means of acquiring facility in reading or speaking a language which has come to be of great practical importance in professional, business, and scholarly pursuits. Indeed in some parts of the country this is still the prevailing view taken not only of the study of German, but of all modern languages. Greek and Latin are still surrounded with the halo of a time when all higher culture was considered to be bound up with a knowledge of Greek and Roman life; while French and German are not infrequently looked upon as upstarts whose standing in the hierarchy of learning is not yet beyond doubt.

It is, however, clear that for some generations past a change has been gradually coming. The first impulse, as far as German is concerned, was given by the great epoch of German literature at the beginning of this century. When Bancroft and

Hedge and Motley returned from their studies at German universities they brought with them not only a fuller equipment of scholarship, but also a strong enthusiasm for the noble intellectual movement which was then shaping the destiny of modern Germany. Following this, there came the influence of 1848. The March revolution struck a chord to which the American heart vibrated; and when the martyrs of this revolution sought a refuge in this country, they found here a ready welcome and intelligent sympathy with German aspirations. In the friendship between Longfellow and Freiligrath this twofold affinity between the two countries as to both literary and political ideals may be said to have received its most notable symbolic expression. Next there followed the general adoption of German methods of scientific research brought here by the steadily growing number of American teachers, physicians, and theologians who had received the decisive stimulus for their life's work at the universities of Berlin, Göttingen, or Heidelberg. And finally, the dominant position acquired by Germany since the war of 1870 gave the American people a new sense of the dignity of the German nation, and kindled interest in the history of the Teutonic race.

There exists, then, to-day an ever-increasing disposition on the part of Americans to approach the study of German as a study leading to an insight into a great national civilization. Of the rapidity with which this tendency is developing, the history of the German department of Harvard University during the last twenty-five years is an index. In 1871-72 there were given two elective courses in German, both of a miscellaneous character. The number of students enrolled in them was 100. Of departmental organization, hardly a beginning had been made. To-day the department consists of ten permanent teachers, namely: One associate professor of German, one professor of German literature, one assistant professor of Germanic philology, one assistant professor of German, and six instructors. The number of courses offered, apart from the prescribed course in elementary German, is 29, and this list includes such courses as the following: History of German literature, German literature in the twelfth and thirteenth centuries, German literature and art from the fourteenth to the sixteenth century, German literature from the Reformation to the classic period, the social and political tendencies in German literature of the nineteenth century, Gothic, Old Saxon, Old High German, Middle Low German, Germanic mythology, Germanic antiquities, and a seminary of German literature and Germanic philology. The number of students enrolled in these elective courses is about 750.

Gratifying as this development is, it brings into clear relief the need of further important improvements. To one of these, namely, the need of a Germanic museum, we wish to call the attention of the community at large.

It is a principle now generally accepted that a nation's history can not be studied adequately without a consideration of its achievements in the monumental and domestic arts. Nowhere does the spirit of a people manifest itself more clearly and impressively than in the buildings devoted to public worship or public deliberations, in the images embodying the popular conception of sacred legend or national tradition, in the appliances for private comfort and security. To the student of Greek and Roman culture nearly all the higher institutions of learning offer at least some possibility of making himself acquainted with the principal monuments of Greek and Roman art. The student of Semitic civilization has an excellent opportunity of examining Assyrian and Babylonian monuments in our own Semitic Museum. The Boston Museum of Fine Arts, in its Japanese collection, gives an admirable conspectus of national life in the Far East. Both the Boston Museum of Fine Arts and the Fogg Art Museum at Harvard contain valuable collections illustrating certain phases of mediæval and Renaissance art. But nowhere in this country is there a chance of studying consecutively even the most important monuments of Germanic civilization. Nowhere in this country can the student obtain a vivid impression of the life and customs of our forefathers, from early Teutonic times to the later Middle Ages, such as is afforded by the Germanisches Museum at Nuremberg and other European collections. Nowhere can be given an accurate conception of the wonderful Romanesque cathedrals of the twelfth century, of the extraordinary power of German sculpture in the thirteenth, of the exquisite works of German wood carving in the fourteenth and fifteenth centuries, or even of the work of such great men as Peter Vischer and Albrecht Dürer.

In suggesting the establishment at Harvard of a museum devoted to this hitherto neglected subject, we do not wish to enter into a discussion of the æsthetic value of German art. We admit that for the cultivation of the sense of formal beauty the study of Italian art is decidedly more important than the study of German art; although we should not be willing to grant this preference to the art of any other modern nation. What we maintain is the paramount importance of such a collection as this for the study of civilization.

Four or five rooms containing views and reproductions of characteristic works of Germanic industry and art from the earliest times to the sixteenth century might form a satisfactory beginning of such a museum. First in the collection, chronologically, would be photographs and casts of such objects from the Neolithic age as may serve to throw light upon the questions of the existence of an anthropologically distinct Teutonic race, of its previous history, and of its geographical distribution in Europe. Next there would follow specimens of the characteristic products of the Hallstatt and La Tène periods; models of the earliest habitations in Germanic territory, so far as their construction can be ascertained from actual remains, from imitations in the form of house urns, and from the descriptions of ancient writers; pictures showing the mode of burial in various epochs, and casts of tombstones with Runic inscriptions. The progress made during the period of the Migrations and the centuries immediately following in the arts of working metals, of carving, and weaving would be shown by reproductions of objects in the museums of Nuremberg, Mainz, and Christiania, and in the British Museum; the development of navigation by models of boats, from the dugout of the lake-dweller to the seagoing boat of Nydam and the Viking ship of Gokstad; the advance in architecture by models of the German, the Anglo-Saxon, and the Norse halls as described in the literatures of the respective countries. German culture during the period from Charlemagne to the Hohenstaufen would be illustrated by photographs of exteriors and interiors of the great Romanesque cathedrals of Aachen, Worms, Speier, Mainz, etc., the Kaiserpfalz at Goslar, the Wartburg and other castles, and by casts of such works of sculpture as the Bernward column of Hildesheim, the brass portals of Hildesheim and Augsburg, the lion of Braunschweig, etc. The thirteenth century would be characterized by photographs of the great Gothic cathedrals, and by photographs or casts of the sculptures at Freiberg, Wechselburg, Naumburg, Bamberg, Freiburg, Strassburg. For the fourteenth century a selection of sepulchral monuments from the Germanisches Museum at Nuremberg would be sufficient; while the fifteenth century should be fully brought to view by representative types of the earlier wood carving, by specimens of the various schools of painting between the Van Eycks and Dürer, and, finally, by as complete a collection as possible of the works of Dürer, Holbein, Peter Vischer, Adam Krafft, Veit Stoss, Michael Pacher, and Hans Bruggemann.

A collection like this could hardly be begun with less than \$10,000. But, if carried out successfully, it would undoubtedly be one of the most useful departments of the university. It would be the first attempt to bring before the eyes of American students a picture of early European and mediæval civilization. It would, at the same time, be a worthy monument to the genius of a people which has had a large part in shaping the ideals of modern life and which has given to this country millions of devoted citizens.

Very few, perhaps, will be surprised to learn that until the close of the century, consequently almost four years after the publication of the appeal, not more than \$4,000 was forwarded to the committee. Meanwhile, the thought to be realized is so striking that, perhaps, it need only be made known to the public at large in order to be speedily carried into execution in the new century. Its success would certainly be an important event in the history of culture. That the men in charge of its execution are eminently qualified to carry out such a work is just as undeniable as the fact that the oldest American educational institution in the country, by its location in the neighborhood of the American Athens, is the most appropriate place for such a Germanic museum.

It is a gratifying fact that the German ambassador, Dr. von Holleben, took a personal interest in the founding of the Germanic museum. By invitation of Professor Münsterberg, of Cambridge, he was present at a luncheon given at his house March 14, 1899, for the purpose of urging the need of a Germanic museum at Harvard. On this occasion he delivered the following address¹ before a gathering of about 200 prominent Germans of New England:

GENTLEMEN: To be greeted by this high-minded gathering—amidst eminent representatives of German science and art, transplanted to America—affords me both honor and pleasure; but it is particularly gratifying to be welcomed in the mother tongue, even though, outside of Germany, I am accustomed to hear those sounds more frequently in this than in any other country, for Germany has a home

¹ Taken from the English translation published in the German-American Review.

in America. Millions and millions have, in decades past, come from abroad and found what they sought for in vain in their old home—in many cases, perhaps, not without fault on their part—free elbowroom for their talent and efficiency. Things no doubt went hard with many, but most of them have for generations risen to respected positions, and at former times, when America did not stand upon its present summit of civilization, German intellect and laboring power, sprinkled all over America, have helped to form in many places what might be likened to an oasis.

At the head of all those contributors to evolutions stand the representatives and supporters of the intellectual wealth of the German people. German science bound the two countries together by ties stronger even than trade and industry. Those ties can not be torn asunder, for science itself can not be extinguished. German science forms the heaven of European civilization, and the Americans are more permeated by this German science than most of them imagine. Here in Boston, under the spell of Harvard University, it is hardly necessary to lay stress upon the overwhelming importance of this wealth of science. Here you all are under the more or less immediate influence of that nursery of science, almost three hundred years old; and it is the more gratifying that the leading higher school of learning in this country stands foremost in the cultivation of German science. Here German methods of research have triumphed. The study of German itself—of German language, art, history, and literature—has taken a firm hold, and has in a few decades found rapid development, and along with it German ideals became more deeply rooted; those ideals, which at times are apt to be endangered in their own country when passions of partisanship and industrial struggle run high, although no government in any country in the world is so anxious to nourish and develop the intellectual wealth of the nation as is that of Germany.

Yea! resting upon the public spirit and on the prosperity of the American people, German ideals are well harbored. But, gentlemen, is it for us to fold our hands in idleness? Is not standing still equivalent to sliding backward? With great pleasure have I learned that a movement is on foot in Harvard circles having for its purpose the erection of a Germanic museum. Whoever has passed through the halls of the Germanic museum at Nürnberg knows what it should look like, and, in view of American willingness to give, I am sure will look like some day in the near future.

The creation of such an institution must needs be, to far wider circles, the source of abundance of suggestions and intellectual impulses in the interest of the German language and German ideals. Let my last words, therefore, express the ardent desire that every one of us may do his duty in furthering the noble object of creating, within the bounds of the leading university of the country, a home-stead for the treasures of German art, language, and history.

The Harvard professors, Dr. Münsterberg, Dr. Francke, and Hugo K. Schilling, and the chairman of the visiting committee, Attorney Henry W. Putnam, likewise spoke. Unfortunately, Professor Münsterberg possesses neither a copy nor a draft of his speech. The following are the reports of the other addresses:¹

Prof. Kuno Francke said:

My colleagues and myself are deeply indebted to you for the impressive and sincere words with which, so to speak, you have pronounced the baptismal blessing of the German realm on the life of our child still unborn. We can not conceal that in many respects our undertaking has special difficulties before it. * * * We Germans in the North must look upon ourselves as champions of German stamp in America; we must consider it our foremost duty to open the eyes of our American fellow-citizens to all that German thought has aspired to and produced in the course of centuries in industry, art, philosophy, literature, and music, and what has led to the commanding position which the German Empire, thanks be to God, occupies at the present day. The very isolation of our position simply makes an undertaking like the museum in question a patriotic duty.

That is one side of the case. On the other hand, we in Harvard are by no means isolated. We know that if not the attention of the world, at least the eyes of one thousand and one American colleges and universities are bent upon us. All that is done in Harvard is echoed and imitated by all the institutions in the country. This may be said of all other branches as of the study of the German language and literature. Nowhere else are there so many and excellently trained teachers; nowhere else is the history of literature, of art, and of thought studied as extensively and scientifically. Yet the outward equipment of the department presents a decided contrast to this favorable status of teachers. Whereas Cornell

¹ Bostoner Anzeiger, No. 552, March 25, 1899.

possesses its Zarncke library; the University of Pennsylvania its Bechstein library, and even so small an institution as the University of Rochester its Ranke library¹, we have nothing worthy of mention in the way of books or other special collections.

If we succeed in forming an institution that will bear the proper relation to teachers, there is no doubt but that in a few years Harvard will be the chief seat and central point of Germanic studies in America. That is what we have in mind. As Dr. von Holleben has so beautifully expressed, we desire to prepare a home for German thought. We desire to raise a structure in which all the phases of national history shall be represented in a modest degree, but in typical views, from the oldest pile dwellings and viking vessels, the magnificent architecture, sculpture, and painting of the Middle Ages down to the glorious period of Weimar, and, finally, to the days of the Niederwald memorial and the German Reichstag; in truth, an undertaking that will be a milestone, not only in the history of Harvard University, but in the development of scientific life in America.

An address by Prof. Hugo K. Schilling followed. He said, in effect:

I hardly know what I can add to what has already been said. Permit me, then, to give a somewhat more accurate description of the proposed museum as we hope it to be. Only the barest outline could be given in the appeal made by the German department some time since in the *Harvard Graduates' Magazine*. Dr. von Holleben has referred to the Germanic museum in Nürnberg, which presents itself to us as the highest ideal of such a collection, and the masterly arrangement of which we shall, as far as possible, take for our model. For us, of course, this ideal is in many respects unattainable. Nor can it be our aim, like the national and provincial museums of Europe, to collect and preserve the original productions of past epochs of national culture in greatest variety. The proposed museum has a purely educational purpose in view. As Mr. Putnam says, it is to enable us to apply the method of object teaching to the academic study of antiquity and of the history of art and literature, and thus to bring before the mind in a realistic way the material and intellectual culture of our ancestors; it is to be a practical means for helping students to penetrate more deeply into the thought and feeling, the laws and morals, the faith and customs of the German nation. It must not be forgotten that the public at large takes a lively interest in such collections, and that it is susceptible in a high degree to their educational influence. Our museum, therefore, will lead to a proper appreciation of the results of German culture by broader circles of this country.

To attain this purpose in most cases, plaster casts or galvano-plastic reproductions of objects, together with models, photographs, plans, and drawings suffice; no great collections of things similar in kind are required, but only a few typical representatives of each class. In this way, as far as possible, the whole development of Germanic or German culture may be represented from the period of the separation of the Indo-Germanic tribes to the close of the Middle Ages, and, if means permit, to the present day.

Pertinent material exists in great measure; all relative to the most ancient times is confined almost exclusively to what has been found in graves, namely, weapons, tools, and ornaments. As regards the transition period from the stone to the copper and bronze ages, discoveries in the oldest pile dwellings of Germany and Switzerland give an insight into an advanced state of culture that corresponds to a remarkable extent with that of the Indo-Germanic tribes at the beginning of their separate existence, as made known by comparative philology; much information is thereby obtained concerning the architecture of their dwellings, their domestic life, food, arms, clothing, utensils, ceramics, weaving, hunting, fishing, cattle-raising, and agriculture. From that time on, discoveries become more and more numerous. The extensive grave field of Halstatt, in Upper Austria, and the more recent pile-work remains of La Tène, in Lake Neuenburg, represent different stages of culture during the iron age, which, if not brought about by the ancient Germans was shared by them. From the time of Caesar and Tacitus the Germans appear in the light of history, and it is easier to define more sharply their characteristics.

Later on we find a new and more abundant source in the literature of the Middle Ages, which must be first interpreted and made more forcible by the knowledge of antiquity. The proposed collection will be a direct help to the study of

¹ This statement is erroneous. Upon the author's inquiry, Registrar Herbert S. West replied that the University of Rochester possesses no "Ranke library," but that the university library contains not fewer than 85,000 volumes, of which many are German. Whether there be a Ranke library in the Theological Seminary or in the Mechanics' Institute, of Rochester, could not be ascertained.

literature by furnishing a tangible representation of the objects of which we must have a clear idea in order to understand many passages in ancient poetry, independently of the fact that for the comprehension of the intellectual energy of a nation a knowledge of its material culture is necessary.

The museum will be of the same practical use for the study of the history of art; in proportion as the plastic arts, in the higher sense, develop and acquire a national individuality, their productions in a museum of cultural history must gradually be brought into the foreground. As in every other instance, the historic development of art and skill, customs and manners must be typically illustrated; thus arms from the stone ax to the armorer's masterpieces of the fifteenth and sixteenth centuries; architecture from the pile hut, and the simple structures depicted on the hut urns, to the Germanic hall of the Anglo-Saxon, Middle High German, and old Northern literatures, to the imperial palace of Goslar, and the typical lord's castle, and the Romanesque and Gothic cathedrals; the development of shipbuilding from the single mast of the inhabitants of pile villages to the large rowboat of Nydam and the viking ship of Gokstad; that of sculpture, brass work, wood carving, and painting, from their beginnings to the masterpieces of Adam Krafft, Peter Vischer, Veit Stoss, and Albrecht Dürer.

From what has been said you will understand that the museum, as regards the latter part of the Middle Ages, will be more specifically German, and with reference to art, historical. As regards the earliest times and the first part of the Middle Ages, it will be more archaeological and generally Germanic. Consequently it will promote the study, not only of German and Old Northern, but likewise of Anglo-Saxon culture and literature, and that encourages me to hope that our project will be approved by Anglo-Americans and receive substantial support.

Henry W. Putnam said:

The members of the visiting committee of the German department of Harvard University have a double interest in the founding of a Germanic museum. In the first place, we share the national feeling expressed by the gentlemen who have spoken before me. Three of us, Messrs. Schlesinger, Peary, and Godfrey Morse¹ are of German extraction, and the others, as do all Anglo-Saxons, belong to the large Germanic race. As the historian, Freeman, has so often said: Germany is our first home, England the second, and America the third.

But what I desire to emphasize is that the museum will be not only a monument of German nationality, but a scientific institution affording students of philology and history what the natural history museum offers to zoologists and botanists and the laboratory to physicists and chemists. It will contribute to the application of modern pedagogical principles and materially advance instruction by observation, the concrete comprehension of reality. At the present day we learn more and more through the eye, by actual observation in contradistinction to mere theory. In this way time is saved, the imagination is quickened, memory is strengthened, and study is made much more interesting.

I well remember the mental torture which I suffered during my college life from reading the description of the Rhine bridge in Cæsar's Gallic war. At that time the greatest stress was laid upon grammatical construction and style. What a different impression this description would have made upon me if it had been illustrated by a model of the bridge and I had thus had a clear perception of one of the greatest military technical works of all times.

The reading of the Nibelungen Lied is dry and unprofitable if teachers treat the poem from a mere standpoint of language without giving true pictures wherever a good museum is at hand of the acting persons, their dress, aims, manner of life, and domestic surroundings.

The great progress which this method means is clear to all and we desire that our children should profit by it. As Baron von Holleben has remarked, we owe this method chiefly to German science, and Americans are more influenced by German science than we think. I acknowledge, with a feeling of pleasure, that we owe a debt of gratitude. We beg of you to-day to continue helping us on the way that you have pointed out to us. Although our country is politically more free than Germany, in matters of education we are to some degree more conservative and even reactionary. Through our race relationship the committee hopes to interest Americans in this project, and I hope that the German-Americans of Boston will take a special interest in demonstrating the art and practical methods of the Fatherland to the American students of the most prominent universities.

¹In the meantime Director Heinrich Conried, of New York, and Dr. F. W. Holls were made members of the visiting committee.

THE GERMAN PUBLICATION FUND OF AMERICA.

The German publication fund of America originated in the idea that the "cradle of German-Americanism" is the proper place for the publication of larger Germanistic works. The very interesting plan framed by Professor Learned reads as follows:

The German contribution to American history and culture has been by far the most important from the continent of Europe, and the ethnographical history of America, which is likely to be the history of the near future, must draw largely upon the study of the influence of the German people in the development of American life and institutions. The increasing interest in this German influence is fast extending to the Anglo-Americans, and many serious and well-trained investigators are turning their attention to this new field of research. A large amount of matter in the form of original documents and special studies is already awaiting publication, thus making it desirable and necessary to establish a permanent fund for the publication of matter relating to the history of the Germans in America.

The plan of this publication includes all matter of a scientific and documentary character touching the "literary, linguistic, and other cultural relations of Germany and America," with such specific divisions as the following:

1. The literary relations of Germany and America: (a) German literature written in America; (b) German literature reprinted in America; (c) American translations of German literature; (d) The influence of American literature in Germany.
2. The linguistic relations of Germany and America, comprising the German dialects of America and the influence of the German language.
3. The German drama and stage in America: (a) The German drama performed on the German stage in America; (b) The German drama on the English stage in America; (c) The literary influence of the German drama in America.
4. German music in America: (a) The history of the German music societies in America; (b) The influence of German music on American culture.
5. German Turner and other societies in America.
6. German art in America.
7. German science, philosophy, theology, and educational methods in America.
8. Commercial relations of Germany and America; German industries, trades, and mechanical arts in America.
9. The German press in America: (a) The native German press; (b) The relations of the German to the American press.
10. The diplomatic relations of Germany and America.
11. The Germans in American wars.
12. German-American biography.

The organization of a national committee of the German Publication Fund of America was set on foot at the University of Pennsylvania in May, 1899, and a local executive has been constituted, as follows: President, Dr. C. J. Hexamer, president of the German Society; treasurer, C. C. Harrison, jr., 123 South Fourth street, Philadelphia; secretary, M. D. Learned, professor of German at the University of Pennsylvania.

The national committee, consisting of representative Germans and Americans, is being constituted of persons who are willing to guarantee contributions ranging from \$100 to \$5,000 to the fund. Smaller amounts will be gladly received. The sum asked for is \$100,000, which will be so invested as to secure a permanent income for the publications and to make all matter available as soon as ready for publication.

To all members of the national committee copies of the works published out of the fund will be sent gratis.

The names of the contributors will be published with each separate volume or monograph.

All matter submitted for publication will be expected to reach a high academic standard in order to be accepted.

Subscriptions of money and contributions of original studies (written in English or German) or other material, manuscripts or prints, will be welcomed from any part of the world.

The publications will be circulated through the regular channels of the book trade, and the proceeds from sales will be applied to the fund.

The publications thus put on a permanent basis will constitute a splendid and lasting monument to the Germans in America.

Subscriptions may be sent by check direct to the treasurer, C. C. Harrison, jr.,

123 South Fourth street, Philadelphia, Pa. Subscribers, who so prefer, may pay their subscription in five or ten monthly installments.

CHARLES J. HEXAMER.
SAMUEL W. PENNYPACKER.
JOSEPH G. ROSENGARTEN.
CHARLES C. HARRISON, JR.
MARION D. LEARNED.

As far as we know, no large amount has been received from subscriptions; in fact, very little has been contributed to the fund besides the sums realized from two benefit plays which were presented by Director Conried in New York, and will be spoken of later.

As Professor Learned states in an article in the *University of Pennsylvania Bulletin*, April, 1900,¹ the idea of establishing the Publication Fund was suggested by the fact that the editor of the *Americana Germanica* received entirely too many and too comprehensive articles for publication in his work. The idea will probably be realized after one leader has been found whose example will inspire other rich men.

The good cause seems to have found such a man in Director Heinrich Conried, of the German theater in New York. So far he has given benefits for five universities in the East, and has furthermore promised to present annually the amounts realized from one performance each for the German Museum in Harvard and the Publication Fund in Philadelphia. Moreover, he is connected with several other institutions, to which he gives the same generous offerings for Germanistic purposes.

So far Director Conried has given the following benefits: (a) Harvard: Goethe's *Iphigenie* (1900), Lessing's *Minna von Barnhelm* (1901); (b) Columbia: The same plays; (c) University of Pennsylvania: Lessing's *Minna von Barnhelm* (1899), *Fulda's Friend of Youth* (1900), Schiller's *Robbers* (1901); (d) Cornell: Lessing's *Minna von Barnhelm* (1901); (e) Yale: The same play.

In the course of time benefits are to be held for Johns Hopkins University and Vassar College. To make these offerings the whole company of the New York theater travel to the place in question and take all the necessary equipment along. The attendant expenses are, of course, very large; nevertheless, in each case the total receipts were presented to the beneficiary. Harvard received about \$2,500.

The importance of this generous support does not consist so much in the amount of money as in the sustained interest in the German theater, and, consequently, in the whole of German literature among American students and their teachers. The survival of only two, namely, those in New York and Milwaukee, of all the German theaters once in existence is, in no small measure, dependent upon the support given to them by educated Anglo-Americans. If interest in the preservation of good German art institutions is kept alive among this element, we may be sure that German art will always keep a few places of refuge in America. It is evident how intimately this question is associated with that of German instruction. Whoever has been inspired by German classical plays on the stage will learn to love the German language and not remain ignorant of its literature. By his excellent classical productions for American students Director Conried has won indisputable merit for promoting culture.

Under its two well-known managers, Messrs. Webb and Wachsner, the Pabst Theater Company, in Milwaukee, which presents plays in Chicago regularly once a week, has likewise given a number of benefits for the University of Wisconsin, the Northwestern University at Evanston, and the German-American Normal Seminary of Milwaukee, and has thus greatly furthered the cause in question. Although the old board of directors was dissolved last year the present management

¹ The Conried and the German-American Publication Funds of America. Reprinted 1900.

seems inclined to follow their example in this respect. Naturally the more moderate means and smaller company of this theater do not allow the same munificence that is extended in the East. Some of the plays given at the Pabst Theater have already been mentioned; a full list could not be obtained.

Besides the gifts presented to the German departments by the German theater, the author learned of the following endowments for German purposes:

I. *Harvard*.—The Sohler fund, which gives an annual prize of \$250 for the best work on a subject from modern literatures.

II. *Columbia*.—The Gebhard professorship of the German language and literature has been established a long time. The Carl Schurz endowment is of recent date. The interest on the latter fund is to be devoted to a scholarship for the continuance of Germanic studies, and an annual sum is to be set aside for the purchase of German books.

III. *Johns Hopkins*.—The Bluntschli library was presented to this university. An annual sum of money is given by a German resident of Baltimore for the purchase of German books.

IV. *University of Pennsylvania*.—The Bechstein library has already been mentioned.

V. *Cornell*.—A large number of books have been presented, many by Andrew D. White.

VI. *New York*.—This university possesses (a) the freshman entrance examination prizes of \$100, (b) the Ridder endowment for the best Germanistic work, (c) the Germanic library presented by Ottendorfer. It will receive besides (d) the Ottendorfer scholarship, from which the sum of \$800 is to be paid annually to one student to continue his studies at a German university. A recent appeal was made to the Germans of New York in memory of the late Mr. Oswald Ottendorfer.

VII. *University of Michigan*.—The founding of the Goethe library has been already mentioned.

VIII. *University of Wisconsin*.—A collection of small endowments, including a sum of \$3,500 for a German seminary library, have been referred to.

IX. *The Washington University* in St. Louis, Mo., has received considerable amounts from Adolphus Busch, the noted brewer. One of his endowments is devoted to a German professorship.

X. *Stanford University*.—The founding of the Hildebrand Library has been referred to.

The renowned German publishing house of F. A. Brockhaus, in Leipsic, has presented several collections to different universities. The German Society of Pennsylvania received over 500 volumes from them.

The above list could not be made more complete. At all events, it is a proof that the cause of German instruction in this country does not lack zealous and sacrificing friends.

IV. BIOGRAPHICAL NOTES.

EDWARD EVERETT.

Though Edward Everett was not so well known in Europe as his elder brother, Alexander Hill Everett, his efforts for the advancement of German in America were by far more important. Born November 11, 1794, in Dorchester, near Boston, he graduated at Harvard with the A. B. diploma at the early age of 17. In 1812 he entered the university as tutor, but gave up his position in 1814 in order to devote himself to thorough scientific studies in German. How highly his abilities were valued at Harvard is proved by the fact that he was designated for the professorship of Greek prior to his going to Germany. He accepted the position later and fulfilled its obligations exceptionally well. He was not a worshipper of the "fetish," but endeavored to clear the way for modern studies and educational

reform. His contributions to the *North American Review* were no small force in bringing this magazine, published in Boston, into prominence. For three years, from February 5, 1846, to February 1, 1849, he was president of Harvard; his failing health, however, obliged him to resign. In 1834 he entered upon political life as member of Congress; the cooperation of so excellent a citizen could not be ignored in molding the fate of the nation. Until his death, January 15, 1865, he was not allowed to retire into private life. His accomplishments as a statesman have been so preeminent that his scientific worth, which we were not justified in ignoring, is apt to be overlooked.

GEORGE TICKNOR.

George Ticknor is best known to the public at large by his interesting *Life, Letters and Journals*, which were published in 1876, and in which he graphically portrays German conditions. Edward Everett and Ticknor were the first Americans to study at Göttingen and lay the foundation of the traditional "students of Göttingen," whose influence upon culture has been referred to. Born at Boston, 1791, he studied at Dartmouth College to adopt the profession of the law. Admitted to the bar in 1813, his desire for knowledge impelled him to go to Europe in 1815. From England he went to Göttingen, where he studied for two years with Everett. In 1819 he accepted the Smith professorship of French and Spanish literature and the college professorship of belles lettres at Harvard. In the year 1820 he was offered a professorship in the University of Virginia at a salary of \$2,500, which was not accepted. Prof. John B. Minor had said of this new institute: "The scheme adopted bears a close resemblance to that of a German university." Ticknor desired to carry out this resemblance at Harvard, and succeeded in enabling Follen to begin his German lectures there. An enthusiastic admirer of German literature, he praised its merits to Americans in the highest terms, and endeavored to remove all prejudices against Germany. With this end in view he discussed Griscom's book on Europe in the *North American Review*. His well-known *History of Spanish Literature* can not be treated of in this connection. He died January 26, 1871, after he had done his part toward founding the Boston Public Library.

GEORGE HENRY CALVERT.

George Henry Calvert, a native of Maryland, was probably the first resident south of Mason and Dixon's line who went to Göttingen, where he studied the German language and literature in 1823. He was a pupil of Beneke, profited by the works of Coleridge, and visited Goethe. As a worshiper of the prince among poets, he went to Weimar, and returned an enthusiast of the first order. His works—*Goethe, His Life and Works* (Boston, 1872), and *Charlotte von Stein* (Boston, 1877)—are a convincing evidence. His *First Years in Europe*, containing an interesting account of student life at Göttingen, had been published in 1866.

HENRY WADSWORTH LONGFELLOW.

The life of Longfellow is too well known to be considered here. To his lectures on Goethe's *Faust*, begun at Harvard in 1838, is due the fact that since then such have been introduced at all American universities. His *Hyperion*, published in 1839, is in part autobiographical, and, together with *Outre Mer*, aroused an interest in German life. Until 1854 he filled the Smith professorship of French and Spanish as Ticknor's successor. He was in turn succeeded by James Russell Lowell. He contributed much toward advancing Harvard, which was beginning to take its position as a leading school for the study of German. Longfellow's attitude toward German literature was fully defined in an interesting lecture delivered by Professor Learned in New York February 28, 1901.

MARGARET FULLER.

In his spirited essay on Margaret Fuller,¹ E. P. Evans states concerning the transcendental movement:

We can hardly form an idea of the ludicrous fear which German books excited in many educated persons of old and New England sixty years ago. At that time German writings were as suspected and forbidden in America as is American hog's meat in Germany at the present day. Many an anxious minister and pious father raised a warning cry against the moral trichinae with which these foreign conceptions of the brain teemed and threatened the life of the soul. It was bad enough if such productions were learned through abridged and revised extracts or had been thoroughly purified in the crucible of a purged translation, but the effect was much more pernicious if anyone dared to enjoy them in the original. The greatest foreign poets and thinkers were hailed with the flattering terms of "poisonous" and "pestiferous." As Goethe received the highest honor from students of German literature and was mentioned oftenest by them, he served as a scarecrow to those who knew him only by name. To overthrow the idol, Professor Felton translated Menzel's renowned work, which Margaret Fuller censured in the fourth number of the *Dial*. Even Longfellow, as charitable as he was, condemned *Elective Affinities* as a "horrible book." The great teacher of morals, Kant, who was obliged to serve as a support to crumbling orthodoxy, is decried by Lady Farrar in her *Recollections of Seventy Years* as the chief promoter of materialism and atheism and the instigator of all kinds of moral evil.

If such was the intellectual atmosphere of the period when the "Coleridgians" and transcendentalists first stepped into action they evidently had a great work to do before German ideas could find an appropriate home. The *Dial*, a weekly which appeared in 1840, was the exponent of these reformers, whose work can not be too highly estimated. Margaret Fuller had acquired her knowledge of German by self-study and quickly extended it by instructing men like Dr. Channing. She kept up a constant intercourse with the Emersons and the idealists of Brook Farm. The appreciation of Goethe as the "master par excellence," in which light he is regarded by many Americans of the present day, can be traced to the action of the *Dial*.

HORACE MANN.

The epoch-making activity of the great educational reformer is the more commendable as his chronic ill health and very limited means were serious obstacles in his way throughout his whole life. Born in Massachusetts, 1796, he studied at Brown College, where he taught for some time. In 1823 he became a lawyer. The irresistible desire to reform the educational system of his country influenced him to accept the position of secretary of the Massachusetts State board of education. According to Professor Emerson, Rev. James C. Carter, and not Mann, is the "father of the normal schools," as the former had already published his *Essays on Popular Education* in 1824 and his plan for normal education in 1826, that was discussed in the *North American Review* of May, 1827. Boone adds that the "Indiana Teacher's Seminary" had been founded in 1834 and the "Teachers' Association of Bowdoin College," in Maine, 1837, for the same purpose. Since, however, all these reforms were based upon the much older ideas of Francke, the dispute as to who has a right to claim the "fatherhood" means nothing. Posterity must decide upon the most successful execution of the thought. The palm must then be given to Mann, who overcame the greatest opposition. The endowment of \$10,000 given by Edward Dwight alone enabled him in 1839 to found the normal school, exclusively for women, in Lexington, Mass., afterwards removed to Farmington. His own means of support were partly derived from the *Common School Journal*, founded by him. His writings on education are among the best that the literature of pedagogics in America has produced. In 1852 he accepted

¹An American Idealist, in his "Contributions," Stuttgart, 1898, page 5 et seq.

the presidency of Antioch College, in Ohio; though the struggles that he endured to carry out his ideas of reform caused his early death in 1859.

HENRY BARNARD.

Barnard, born January 24, 1811, in Hartford, was not only fifteen years younger than Horace Mann but possessed a stronger constitution. He, therefore, saw the aims for which both strove with the same degree of fervor in a great measure realized. After he graduated from Yale and continued his studies in Europe he became a lawyer and was elected to the legislature of his native State, Connecticut, in 1837. Owing to his efforts public schools were placed under State supervision. He was made secretary of the State board of education, and as such proceeded to found a teacher's institute in 1839. The State Normal School of New Britain, planned by him, alone educated 2,258 teachers from 1850 to 1867. From 1855 to 1883 he most successfully edited the *American Journal of Education*, which is justly regarded as a pedagogical work of lasting merit. In 1857 he was made chancellor of the University of Wisconsin; in 1866, president of St. John's College, in Annapolis, and in 1867, first United States Commissioner of Education. Barnard filled this newly created office until the year 1870, and died at an advanced age in his birthplace July 5, 1900.

FRANCIS WAYLAND.

Wayland was born in New York in 1796, and in 1813 graduated from Brown University, Providence, R. I., to which his chief labors are confined. The result of his being president of this small institution was that the attendance, numbering only 150 students in the year 1849-50, rose to 252 in the year 1854-55. Nevertheless the "innovator" was not popular, and the majority of the trustees voted against the principles contained in his celebrated "Report to the corporation of Brown University on changes in the system of college education," in which he recommended the adoption of German methods of instruction. Because of the consequent friction he resigned in the year 1855, and died ten years later. Interesting details of his life, his labors as a writer on pedagogics and philosophy, and a sketch of his character are given in the work, *A Memoir of the Life and Letters of Francis Wayland*, by F. and H. L. Wayland, New York, 1867.

BARNAS SEARS.

The life of Dr. Barnas Sears, who lived from 1802 to 1880, shows to what an extent ideas of reform prevailed about the middle of the past century. He was the successor of Horace Mann as secretary of the State board of education of Massachusetts and of Wayland as president of Brown University (1855-1867). From 1845 to 1848 he studied in Halle, Berlin, and Leipzig, and associated with the most celebrated professors who taught there. He thus acquired a thorough understanding of German methods and applied them in practice. One of his pupils gives the following account of his way of teaching:¹

Sears laid comparatively little stress upon accidental mistakes and brilliant answers, but rather took the work of the whole year into question. The feverish anxiety with which we went to recitation ceased; the more talented and those less gifted could give their whole attention to the subject explained. Study was made agreeable and easy. Sears endeavored mostly to teach us to think, and guarded himself against impressing his pupils with his own views.

CHARLES FOLLEN.

Follen's name will always be inseparable from the history of American education, as he was the first to deliver German lectures at Harvard and introduce

¹ Tolman, *History of the Higher Education in Rhode Island*, page 138.

German athletics into the New World. Born September 3, 1795, as a student he took part in the wars for freedom and the founding of the Burschenschaft. In 1818 he had established himself as a private teacher, but since the deeply sensitive poet had yielded too strongly to his republican feeling in the well-known song, "Brause, du Freiheitsdrang, brause wie Wogendrang," he was obliged to flee to Switzerland, where a professorship in Bâle was bestowed on him. But as the Prussian Government demanded his extradition he emigrated to America with his friend and companion in suffering, Dr. Beck. How he became connected with Round Hill School, and his subsequent work at Harvard, have already been mentioned. After he lost his position at Harvard he became the minister of a Unitarian Church in New York, and afterwards accepted a call to East Lexington. Nevertheless he devoted a large part of his time to literary work and lecturing. Invited to lecture by the New York Mercantile Library, the steamer *Lexington*, on which he sailed February 13, 1840, took fire during the trip and Follen lost his life. His death was deeply lamented. In 1834 his younger brother Paul likewise came to America with Frederick Münch ("Far West") and the Giessener Emigration Society, and lived in Missouri till his death in 1844.

CHARLES BECK.

Charles Beck was born August 19, 1798, in Heidelberg, and through the influence of his stepfather, De Wette, professor of theology, went to Berlin, where he completed his studies. His stepfather being suspected of favoring plots against the Government, as the burschenschaft movement was considered, he lost his position and was compelled to emigrate to Switzerland. Here Beck became intimately associated with Follen, and went with his friend when he fled to America. Soon after his arrival in New York he announced his intention of becoming an American citizen, and the Republic has never had one more faithful. In 1830 he temporarily conducted a school in Philipstown on the Hudson, yet, as far as we know, he fulfilled the duties of professor of Latin at Harvard without interruption. After bidding farewell to the university he devoted himself with untiring zeal to his duties as a citizen and to private study. Twice he was elected to the State legislature, and at the same time he was a member of several learned societies and financial corporations. He visited Germany three times, partly for recreation and partly for literary purposes. At the outbreak of the civil war, although 60 years of age, he enlisted as a private in a company from Cambridge, and willingly assumed the heavy duties of a soldier's life. On account of his age, however, he was not accepted when the Army was mustered in. He made amends, nevertheless, by sending hundreds, fully-equipped, into the field of action. His generosity knew no bounds. While riding with his daughter he died suddenly from an apoplectic attack, March 19, 1866. The eulogies pronounced over him prove what an honor he was to the German name in America.

FRANCIS LIEBER.

Francis Lieber was born March 18, 1800, in Berlin. As a half-grown schoolboy he marched against Napoleon in 1815, and was wounded in battle. After graduating at Jena, his Philhellenism impelled him to take part in the Greek war for liberty; however, the undertaking was a great disappointment to him. His participation in the burschenschaft movement led to a long trial and forced him to emigrate. Unable to establish himself in London, he came to America in 1827, upon invitation of his friend Follen. Here he soon entered into personal and literary relations with the most prominent men in the "Athens of America." He was speedily associated with Josiah Quincy, president of Harvard; the renowned jurist, Judge Story; the historians Prescott, Bancroft, and Motley; the poet Longfellow; Senator Charles Sumner, and others. He was thus in surroundings

that enabled him to engage in his first American work as editor of the *Encyclopedia Americana*, based on the Brockhaus's *Konversations-Lexikon*, published by H. C. Carey, Philadelphia.

The work for the encyclopedia, which claimed five years of his time, gave him access to the circle of educated Americans. He engaged a full force of well-educated writers, though he himself wrote nearly all the articles on the subjects of history, political economy, and jurisprudence, and in this way foreshadowed the course of his future life in this country. It is hard to tell to what extent the dissemination of German ideas and the appreciation of German language and education are owing to the fact that Lieber produced the first American encyclopedia, and made use of the collective work of the best German writers.

After expressing his views on education in *Letters to a Gentleman in Germany* (1834), he was called to the professorship of history and political economy in South Carolina College, Columbia, S. C., in 1835. His leisure was employed in writing the following works: *Manual of Political Ethics* (2 volumes), *Legal and Political Hermeneutics* (1 volume), *Civil Liberty and Self-Government* (2 volumes).

These works excited the greatest attention and occasioned his call to the chair of history and political economy at Columbia University (1857). Political conditions rendering his further stay in the South unpleasant, he had resigned his professorship. His inaugural address in his new position, delivered February 17, 1858, treated of the necessity of the studies of history and political economy in free States and received great applause.

When the civil war broke out, he rendered valuable service to the Government. He was often called to Washington by telegraph to discuss important questions of the war and international law with President Lincoln. From the point of constitutional law he discussed secession in numerous pamphlets published by the Loyal Publication Society, of which he was the founder and president. His formation of a code of war, undertaken at the request of the President, was published as General Order No. 100, and distributed among all the staff officers of the Army. This work marks an epoch. Criticism has pronounced it a masterpiece of the first order, and *Bluntschli* published it as a supplement to his *Modern Law of Nations*.

Lieber's work at Columbia continued till his death, October 2, 1872, and was so successful because he applied German methods of teaching and never failed to try to make his pupils acquire a thorough understanding of the subject in question. At the end of every lesson he announced the passages from different authors that were to be read for the next one. All definitions, proper names, and dates were written by him on the blackboard, so as not to be misunderstood. Every student was required to have a well-bound notebook, in which blank pages were left for important comments. He understood how to sustain his pupils' interest, and his personal manner toward them was such that they loved and esteemed him.

JOHN LOTHROP MOTLEY.

Motley was born in Massachusetts, April 15, 1814, learned German upon the advice of Bancroft, and as a young student delivered a eulogy on Goethe. In 1832 and 1833 he studied with Bismarck at Göttingen. The prince wrote to his biographer, Dr. Holmes, in regard to his student life: "Motley was generally more studious than most of his companions. He did not speak German especially well, but nevertheless excelled by his intellectual conversation. In the autumn of 1833 we went to Berlin to continue our studies and lived together in a house on Friedrichsstrasse. Motley wanted to translate Goethe's *Faust* at the time, and attempted to write original German verse."

BAYARD TAYLOR.

Bayard Taylor had German blood in his veins, his grandmother having been a German. He was born in Pennsylvania, January 11, 1835, and taught when 17

years old, before his great European journey on foot, during which he visited Freiligrath and other great men. He learned German from books, having gained a great love for it through Howitt's *Rural Life in Germany*. During his second or third visit to Germany, in 1856, he became acquainted with Miss Marie Hansen, in the home of his friend, Buebe, to whom she was related, and married her October 27, 1857. His *Northern Travels* appeared simultaneously in German and English. In 1870-71, his celebrated translation of *Faust* was published and excited the greatest attention; his *School History of Germany*, published by Appleton in 1872, did not awaken much interest. His *Studies in German Literature*, on the other hand, published in 1879, were very well received after his death, which occurred in Berlin, December 19, 1878.

We can understand that President Andrew D. White could not have made a better choice than Taylor to open the German lectures at Cornell. What value the latter placed upon German instruction we learn from the following:

31 WEST SIXTY-FIRST STREET, NEW YORK, *March 15, 1875.*

MESSRS. O. OTTENDORFER, E. F. EBERSTADT AND
OTHER MEMBERS OF THE COMMITTEE.

GENTLEMEN: I sincerely regret that my professional duties require me to be in Vermont this week and that I am thus prevented from being here to-morrow night. Otherwise, I should gladly accept your invitation to be present at the meeting in Cooper Institute, as the fulfillment of a pleasant duty. I consider one modern foreign language a most important branch of study; in my opinion, none other arises and develops the mental powers of children in the same way. From my observations and chiefly from the experiences gathered in a recent visit to the Western States, I am convinced that the study of German, where it has been introduced for three or four years, has fully justified its claim. Pupils that excel in German are not only far from being behind in the English branches, but are, almost without exception, first in them.

In Germany, the *Bürgerschulen* have attained the most brilliant results from the introduction of English instruction, and the graded schools of our larger cities hold about the same rank. Even if our system were inferior to the German in the treatment of studies and firm organization, we must not forget the high purpose at which it aims and which it must fulfill.

As I am about to leave, I have not the time to give further reasons for my hearty participation in your movement; moreover, I trust that the speakers of the evening will make this superfluous. In haste.

Respectfully, yours,

BAYARD TAYLOR.

OSWALD SEIDENSTICKER.

Oswald Seidensticker, the son of a lawyer, was born in Göttingen in 1825. On account of "acts of high treason" the father was compelled to spend fifteen years in prison and emigrate to America in 1845. Oswald accompanied him and devoted himself with great zeal to the study of philosophy and philology. After he had taught in Boston he was called to the University of Pennsylvania in 1867 to fill the German professorship. He performed the duties of this position with great success until his death, January 10, 1894.

Next to Frederick Kapp, Seidensticker is the most prominent German-American historian. His contributions to the *Deutschen Pionier* of Cincinnati, *Rattermann's Deutsch-Amerikanisches Magazin*, and the *Pennsylvania Magazine of History* are of great value, as are the following works: *Geschichte der deutschen Gesellschaft von Pennsylvanien, 1764-1876*: Philadelphia, 1876. *Ephrata; a Story of American Convent Life*: Cincinnati, 1883. *Die erste deutsche Einwanderung in Amerika*: Philadelphia, 1883. *Bilder aus der deutsch-pennsylvanischen Geschichte*: New York, 1886. *German-American Events, principally of Pennsylvania, down to 1870*: Philadelphia, 1892. *The First Century of German Printing in America, 1728-1830*: Philadelphia, 1893.

ANDREW D. WHITE.

Few Americans have labored with the admirable zeal and the same degree of success to promote German instruction, make use of the fruits of German intel-

lect for the benefit of the American people, and last, but not least, to strengthen the friendly relations between both nations, as the illustrious representative of the United States in Germany, Andrew D. White. In 1855-56 he studied in Berlin, and afterwards, 1860 and 1866, enjoyed repeated opportunities of spending some time in Germany on diplomatic missions. The country and its inhabitants became very dear to him, and he exerted himself to learn all that could be utilized for the advancement of American civilization.

The industrial schools that have done so much to promote German industry were his special study. "In the years 1867 and 1868," he himself relates, "the opportunity was given to me to study this system with a view to its introduction into America, and I learned to realize, as I had never done before, what hearty patriotism, what earnest and intelligent effort, and what patient and hard work is devoted to the establishment and development of those schools."

In an address¹ delivered June 1, 1881, he stated:

It is said that the United States will have 100,000,000 inhabitants in the near future. The national characteristics of these will be German thoroughness, stability, and faithfulness, Anglo-Saxon energy and firmness, and Italian imaginative-ness. Does it mean nothing that a German element enters into such association? In America we are accustomed to speak of England as the mother country, but in the future a large number, if not the majority, of the population will claim Germany as the mother country, and one from which neither recollections of war nor wrongs on land or water will separate them.

It would take more space than we have at command to do justice to White as teacher, statesman, and author. His most important work is *A History of the Warfare of Science with Theology in Christendom* (2 volumes, 1896). In a speech delivered by Mr. White May 22, 1897, at the farewell banquet of the *Deutscher Liederkranz*, held in his honor, in New York, before he left for Berlin to enter upon his present duties,² he closed with the following remarks:

I go back to Germany as one of the same family, bound by the closest ties. I am going to visit a mother again—Mother Germania, who fears God and no one else on earth; a mother of art, science, and literature, who has spoken to us through Kant and Lessing, Goethe, Schiller, and Fichte; has done wonders of political wisdom through Stein, Scharnhorst, Bismarck, * * * and to-day furnishes an example of penetrating wisdom, resolute courage, and thorough care for all that goes by the name of civilization.

DANIEL C. GILMAN.

Daniel C. Gilman was born in Norwich, Conn., June 6, 1831, and in 1852 graduated at Yale College, where he received the A. M. degree in 1855. The title of LL. D. was conferred on him later by Harvard, St. John's College, Columbia University, Yale University, University of North Carolina, and Princeton University. From 1856 to 1865 he was librarian and from 1863 to 1872 professor of physical and political geography at his alma mater, and resigned this position to become president of the newly formed State University of California. In his inaugural address he said: "In these days, when so much that is new and important first appears in German and French, no system of education can be called liberal which does not include these tongues." Accordingly an important position was given to the modern languages. In 1875 he accepted the presidency of the Johns Hopkins University, which he has successfully managed for a quarter of a century. In an address delivered at Harvard in 1866 on *The Characteristics of a University* he drew attention to the American emigration to German universities, adding, "and the line which began with Everett, Ticknor, Bancroft, and Woolsey has been unbroken to this day. Through those returning wanderers and through the importation from Germany, England, and Switzerland of foreigners distinguished as profes-

¹ Quoted by Seidensticker in *Die erste deutsche Einwanderung in Amerika*, page 9.

² A very good extract from this speech is given by Evans, *Amerikanische Literatur- und Kulturgeschichte*, page 223.

sors—Lieber and Beck, Sylvester and Long, Agassiz and Guyot, and their co-peers—the notion of a philosophical department of a university superior to a college, independent of and to some extent introductory to professional schools, has become familiar.”

The following, from the same speech, is particularly striking: “We need but few universities, but we need them strong.”

Later speeches referred to “university libraries” (Ithaca, October 7, 1891) and “Higher Education in the United States” (Chicago, 1893).

The above speeches form the contents of his interesting book, *University Problems in the United States*: New York, 1898. Among his larger works are the *Life of James Monroe* and an *Introduction to De Tocqueville's Democracy in America*.

Gilman is corresponding member of the British Association and officer of public instruction in France. From 1893 to 1899 he was president of the American Oriental Society.

CHARLES WILLIAM ELIOT.

Eliot was born in Boston March 3, 1834, and graduated at Harvard in 1853. The years 1863 to 1865 he spent in Europe, in order to continue his special studies of mathematics and chemistry and to learn foreign methods of instruction from personal observation. The consequence is that since he has been president of Harvard (1869) he has labored to promote modern-language instruction, to introduce liberty of study, and to elevate his university to a scientific center that will occupy no subordinate position to German universities. With the exception of Professor Bartlett, who studied in Berlin and Bonn, all the professors of the German department were born in Germany. Most of the instructors, likewise, are native Germans or completed their studies in Germany. In Prof. Hugo Münsterberg the university has gained a very competent scholar for the professorship of psychology. The number of students that take the German course is far above one thousand.

In his address delivered in Cambridge at the close of the year 1889, upon occasion of the seventh annual meeting of the Modern Language Association, President Eliot made the following interesting remarks concerning his participation in the successful work of this society:

In 1875 we established, for the first time with us, the examination for admission in French or German, which I am sure you consider a considerable step toward the proper recognition of French and German in the secondary schools. But it was only in 1887 that we took here a step which I trust may yet be taken by many American institutions, namely, the putting of advanced examinations in French and German upon a par with advanced examinations in Latin, Greek, mathematics, and all other subjects at the admission examinations.

Since then this anticipation has been realized.

Among other works, Eliot has written the following: *Manual of Qualitative Chemical Analysis*, *Manual of Inorganic Chemistry*, *Five American Contributions to Civilization and other Essays*, and *Educational Reform*. The latter work has been much used for this report.

MARION DEXTER LEARNED.

Marion Dexter Learned was born near Dover, Del., July 10, 1857. He graduated at the Wilmington Conference Academy at Dover in 1876. After one year's teaching in a public school in Dorchester County, Md., he entered the sophomore class at Dickinson College in the autumn of 1877. In 1878-79 he was principal of the public academy at Preston, Md. In the spring of 1878 he returned to Dickinson College, where he received the degree of A. B. in June, 1880, and that of A. M. in 1883. From 1880 to 1884 he was professor of languages at Williamsport Dickinson Seminary, Williamsport, Pa. In the autumn of 1884 he entered Johns Hop-

kins University as graduate student of German. In 1885 he matriculated at the University of Leipsic, returning to Johns Hopkins in the autumn of that year, where he was Fellow in Modern Languages in 1885-86, spending a part of the latter year also in Germany. He was instructor of German from 1886 to 1889, having received the degree of Ph. D. in 1887; associate, 1889 to 1893; associate professor, 1893 to 1895. In 1895, he was called to the professorship of the Germanic languages and literatures in the University of Pennsylvania. Among his writings are the following: *The Pennsylvania German Dialect*, Baltimore, 1889; *The Saga of Walther of Aquitaine*, Baltimore, 1892; *Beginnings of German Culture in America*, Baltimore, 1894; *The German American Turner Lyric*, Baltimore, 1895; *German at the University of Pennsylvania*, inaugural address, Philadelphia, 1896. He was founder and editor of the *Americana Germanica* (quarterly); among his contributions to this journal are: *Ferdinand Freiligrath in America*, Francis Pastorius' Bee Hive, and *Schwenkfelder Documents*.

Occasional addresses separately printed: *Bismarck's Service to German Culture*, memorial address, New York, October 18, 1898; *German as a Culture Element of Education*, Cincinnati, 1898; *National Education and World Culture*, president's address before the Teachers' Union, Philadelphia, 1900; *Germanistics and Polite Literature in America*, read before the Deutscher Verein of Columbia University, December 19, 1900.

Learned is president of the National German-American Teachers' Association, 1899-1901.

HENRY WOOD.

Henry Wood was born July 7, 1849, in New Bedford, Mass.; graduated at Haverford College in 1869; studied in Berlin and Leipsic, and graduated from the latter, in 1879, as doctor of philosophy. After teaching two years at the Friends' School in Providence, R. I., he was called to the Johns Hopkins University in 1881, where has been engaged for the past twenty years. From 1885 to 1892 he was associate professor, and since the latter date he has been professor of the Germanic languages. Besides his critical edition of Goethe's *Faust*, he has published several articles on German literature in the *American Journal of Philology*, and the *Quarterly of the History of Literature*.

KUNO FRANCKE.

Kuno Francke, principal of the department of Germanic languages and literatures at Harvard University, was born in Schleswig-Holstein; studied in Germany under Giesebrecht, and graduated in Munich in 1878. After working for two years under Waitz at the *Monumenta Germaniæ Historica*, he was called to Cambridge ten years ago, since which time he has considered it his chief duty to reconcile German and American culture. The following works have been published by him: *Social Forces in German Literature*, New York, 1896, third edition, 1899. *Glimpses of Modern German Culture*, New York, 1898.

At the Goethe memorial celebration in New York and Cleveland he recently delivered a most interesting address on Goethe's *Vermächtniss an America*, in which he illustrates the many relations that have existed, and still exist, between Goethe and the intellectual life of America in a masterful way.

HANS CARL GÜNTHER VON JAGEMANN.

Hans Carl Günther von Jagemann, professor of Germanic philology at Harvard University, is German born; began his studies in Leipsic and completed them at the Johns Hopkins University. As president of the Modern Language Association and coeditor of the *Modern Language Notes* he exerts a wide influence. From 1886 to 1889 he was professor of the German language and literature at Indiana University, whence he was called to his present position.

WILLIAM HENRY CARPENTER.

William Henry Carpenter, born in Utica, N. Y., in 1853, is at the head of the German department of Columbia University in New York. Like his predecessor, Boyesen, he taught at Cornell University, and continued his studies at the German universities of Leipsic and Freiburg. His study of Icelandic took him to Copenhagen and Iceland, and for his doctor's thesis he published the epic *Nicolásdrapa Halls prests*, which had not been printed before. Since 1883 he has been at Columbia, where the regular professorship was given to him in 1895.

CALVIN THOMAS.

Calvin Thomas, born in 1854, studied in his native State, Michigan, at the University of Michigan, where he graduated in 1874. After some practice in teaching he went to Germany to study philology for several years at Leipsic. From 1879 to 1896 he taught at the University of Michigan, after which he devoted a summer session to the study of Goethe in Weimar and was then called to Columbia, where he has since held the so-called Gebhard professorship. The list of his writings is too long to be given here; his commentaries on Faust, parts first and second, as well as his other contributions to Goethe literature (*Goethe and the Conduct of Life*, 1886), however, may not be omitted.

ARTHUR H. PALMER.

Arthur H. Palmer, head of the German department of Yale University in New Haven, studied at the Western Reserve University in Cleveland, where he graduated in 1879. He continued his studies for several years in Germany and Scandinavia, and since 1891 has had entire charge of German literature and philology as well as the Scandinavian languages at Yale University.

GUSTAV GRUENER.

Gustav Gruener, professor of German at Yale, was born in New Haven in 1863, graduated at Yale in 1884, and continued his studies there until 1887. For two years he studied in Berlin and Munich, and in 1889 entered the German department of his home university. In 1892 he was made assistant professor, and full professor in 1897.

HORATIO S. WHITE.

Horatio S. White, dean of the faculty and professor of the German language and literature at Cornell University, Ithaca, N. Y., has been at the head of the German department since 1891. Born in Syracuse, N. Y., in 1852, he studied at Harvard University, where he graduated in 1873, and afterwards continued his studies in Europe for several years. In 1878 he was admitted to the bar in New York, but gave his attention to philological studies and was made professor extraordinary of German at Cornell University in 1883. As a member of the Weimar Goethe Society he is in direct relation with Germany. He is coeditor of the *Americana Germanica* and the author of many works, of which his *Deutsche Volkslieder* was published in 1892.

JAMES T. HATFIELD.

James T. Hatfield, professor of the German language and literature at the Northwestern University at Evanston, Ill., graduated in 1890 at the Johns Hopkins University, and immediately afterwards assumed the duties of his present position. The prosperity of the German department at that university is the best evidence of his efficient worth. He is the author of many writings.

HENRY COHN.

Henry Cohn was Hatfield's faithful assistant until his death, which occurred suddenly March 21, 1900. Born in Breslau in 1847, he emigrated to America as a boy. In 1867 he graduated at Columbia College and later studied history, philosophy, and Germanistics in Berlin for three years. After teaching at different higher schools, he was made professor at Amherst College in Massachusetts in 1876, and afterwards resumed the direction of the German department of the Summer University of Chautauqua; he discharged the duties of this position with marked success until his death. He was also director of a school for languages in Chicago, and in 1893 assumed the duties of his late position as assistant professor of German at the Northwestern. His first work there was the foundation of the *Deutscher Verein* and the *Deutscher Litteratur Verein*, which have both flourished to such a degree that a special German clubhouse is under discussion; the plans have been drawn and well-to-do German-Americans have promised the funds. The work of these associations claimed a great deal of his time. As he directed the Sunday school of the Sinai Congregation in Chicago, and instead of resting during vacation was obliged to do the extensive and difficult work in Chautauqua, we can understand that he undertook too much. His mind was so centered in his profession, however, that he would not allow himself any rest. All his personal friends, among them President Rogers, and the tributes paid to him by the press, unite in commending his high idealism. His willing denial of the rewards of this world to give himself up completely to the ideal may be compared with the character of the celebrated philosopher Baruch Spinoza, who dwelt altogether in the higher world of his thoughts. An excellent life-size portrait of him is a lasting ornament to the German seminary of the Northwestern.

WILLIAM HENRY ROSENSTENGEL.

Born September 10, 1842, in Barmen, William Henry Rosenstengel followed the profession of teaching and accepted a call to America as teacher and director of a private school in St. Louis in the year 1865. Afterwards he was appointed teacher of German at the Central High School of the same city, and was called to the State University of Wisconsin in 1879. Here he enjoyed the satisfaction of seeing the same increased interest in German that was manifested in most other universities, and that inspired him anew to devote all his energies to the German cause. He was particularly active in publishing popular scientific lectures and contributions to the press, and also wrote a series of articles on educational subjects. He found a special field of labor in the German-American Teachers' Association, of which he was president for a long time, and in the Normal School of Milwaukee founded by it.

In its eulogy on Professor Rosenstengel the Milwaukee Sentinel states "that he was the only German teacher when called to the university, and that he lived to see the number of his assistants increase to eight. During this period of prosperity and growth, he was the head of the department. For some years Dr. E. K. J. H. Voss had been assistant professor and relieved him of a part of his work. In the history of the university, however, the name of Rosenstengel will always be associated with the epoch of its greatest development. Let us reflect for a moment: When he came, the institution did not number 400 students, that were accommodated in 3 buildings. When he died there were 2,400 students instructed in 12 buildings."

H. HUSS.

H. Huss, professor of German in the John C. Green School of Science of Princeton University, was born in Thüringen in 1847, studied at Jena, where he graduated in 1870. To study the Romanic languages thoroughly, he spent some time in

Geneva, Florence, and Naples, and taught German six years in Rome. From there he was called to Princeton, where he has had leisure to write many works.

A. B. FAUST.

A. B. Faust, professor of German at the Wesleyan University in Middletown, Conn., was born of German parents and studied at Johns Hopkins University, where he graduated in 1892 as doctor of philosophy. Since 1896 he has directed the German department at the Wesleyan University. Among his writings the biography of the so-called "poet of both hemispheres," Charles Sealsfield, is most interesting to the general reader.

CHARLES FREDERICK RICHARD HOCHDÖRFER.

Charles Frederick Richard Hochdörfer, since 1891 professor of modern languages at Wittenberg College, in Springfield, Ohio, was born in Magdeburg in 1854, studied in Berlin and Halle, and, after teaching for several years, accepted a call to America in 1884. Having written an interesting work entitled *Observations on the Language of the Court of Love*, he graduated at Harvard University in 1888. During the summer vacation he likewise lectures at the University of Chicago.

LAWRENCE A. MCLOUTH.

Lawrence A. McLouth is the head of the German department of the University of New York. Like Calvin Thomas, he was born in Michigan, and graduated at Ann Arbor in the year 1887. For some time afterwards he directed a high school. After pursuing philological studies in Heidelberg and Leipzig, he returned to America as a teacher at New York University, where he has occupied his present position since 1895.

EUGENE H. BABBITT.

Eugene Howard Babbitt was born in Connecticut in 1859 and studied at Harvard, where he graduated in 1886 with distinction. Twice he interrupted his teaching at this institution and the Massachusetts Institute of Technology to devote himself to study in Berlin, Paris, and Copenhagen. From 1891 to 1900 he was instructor at Columbia, and then accepted the professorship of modern languages at the University of the South in Tennessee. Among other writings, he has published the following interesting treatises: *Modern Languages as a Means of Intellectual Training*, *The Preparation of Modern Teachers of Language for American Schools*, and *The Pronunciation of English in New York and Neighborhood*. He possesses an excellent knowledge of the German language.

STARR WILLARD CUTTING.

Starr Willard Cutting, the director of the German department of the University of Chicago, graduated in 1881, continued his studies in Germany, and taught modern languages at the University of South Dakota and Earlham College in Richmond, Ind. In 1893 he graduated in Baltimore, and was then called to Chicago.

HERMANN COLLITZ.

Prof. Hermann Collitz has directed the German department of the excellent woman's college in Bryn Mawr, Pa., since 1886. Born in Hanover in 1855, he studied in Göttingen and Halle, and established himself as a private teacher in Halle in 1885. Professor Collitz has made a reputation for himself by several important scientific works.

LAURENCE FOSSLER.

Professor Fossler, who has had charge of the German department of the State University of Nebraska since 1889, was born in Germany in 1857 and came to America in 1871. He went to school in Lincoln, but pursued his scientific course at German high schools. On his return to America he was engaged at the high school of Lincoln, and was called from there to the university.

GEORGE ALLISON HENCH.

George Allison Hench was born in Pennsylvania October 4, 1836, graduated at Lafayette College, Easton, in 1885, and then studied at the Johns Hopkins. In 1887-88, he continued his studies in Berlin and Vienna; in 1888-89 he was a fellow at Johns Hopkins, and graduated there as doctor of philosophy. The year 1889-90 he spent in Europe, and was called from there to the State University of Michigan, where he remained, first as teacher, and subsequently as director of the German department, till his untimely death, the result of an accident, in 1899. His doctor's thesis referred to the *Fragmenta Theotisca*, and determined the course of his scientific study. His first work was entitled *Monsee fragments; newly collected texts with introduction, notes, grammatical treatise, and exhaustive glossary and a photolithographic facsimile*; Strassburg, Trübner, 1891. The second was entitled *Alt-Hochdeutsche Isidor, Facsimile Ausgabe des Pariser Codex nebst, kritischem Text der Pariser und Monseer Bruchstücke*, Strassburg, Trübner, 1893. Besides these works he published valuable contributions to the history of the German language and literature in the *Journal of Germanic Philology*, and in the *Modern Language Notes*. In a eulogy on him by Professor Learned, in the *Americana Germanica*, he says: "As a teacher he was highly successful, and the testimony of those who were influenced by him is expressed in such words as 'his ideals were so high, his vision was so broad.' He brought to his teaching that peculiar stimulus which comes from early distinction. At the age of 30 he had won international recognition and esteem." The loss of a man like Hench is very hard to replace.

HERMANN SCHOENFELD.

Hermann Schoenfeld, professor of German and of European history at Columbian University, in Washington, was born in Oppeln in 1861 and studied in Berlin, Breslau, and Leipsic. Called to Providence, R. I., in the department of modern languages, in 1888, he contributed many articles to the most important German magazines here and abroad. Many have been made use of for this work and have been given among the works of reference. From 1891 to 1893 he was instructor at Johns Hopkins University and published articles on Brandt and Erasmus, Erasmus and Rabelais, and Slavonic literature and history. He was then sent to Russia on a commission of the American Government and spent two years there. As a result of his travels he published his work on Higher Education in Russian, Austrian, and Prussian Poland, and *The Purposes of the Great Siberian Railway*. Since 1895 he has been professor in Washington and has edited *German Historical Prose*, *Mary Stuart*, and *Ranke's Charles V.* Numerous articles in *Johnson's Universal Cyclopedia* and *Brockhaus's Konversations-Lexikon* are by him. Since the beginning of the year 1901 he has been professor at the summer school at Cornell University.

GUSTAF E. KARSTEN.

Gustaf E. Karsten, professor of German at the Indiana University, Bloomington, Ind., was born in West Prussia in 1859 and studied in Leipsic, Königsberg, Heidelberg, and Tübingen, where he graduated as doctor of philosophy in 1883. Until he was called to his present position he was lecturer of Germanic and

Romance philology at the University of Geneva. Since January 1, 1897, he has edited, at a great personal sacrifice, the *Journal of Germanic Philology*, which is of the greatest value to all who aspire to a thorough knowledge of the researches that have been made in English and German.

OTTO HELLER.

Otto Heller, professor and, for the time being, only teacher of German at Washington University, St. Louis, has been laboring unremittingly for the good cause since 1893. Heller is German by birth and education and completed his studies abroad.

JULIUS GOEBEL.

Julius Goebel was born in Frankfort on the Main in 1857; studied philosophy and Sanscrit in Leipsic and Tübingen; accompanied his father, the well-known German-American teacher, Louis Goebel, to America, and was called to the Johns Hopkins University shortly after his arrival in this country. Here he found the opportunity of becoming one of the most active members of the newly founded Modern Language Association. His lecture, delivered at the second annual meeting, in 1885, on German classics as means of education, was one of the most important given at the meetings of this association. The suggestion to study Goethe as "an independent ideal of modern culture, which is not based upon Greek and Latin authors," has become again a subject of earnest thought to later American teachers. His public lectures on the history of literature, delivered in 1886-87 at Johns Hopkins, were very successful. From 1888 to 1892 he edited the *Belletristische Journal* in New York, and has since been engaged at the newly founded Leland Stanford Junior University, in California. In 1894 he succeeded in acquiring the celebrated Rudolf Hildebrand library for this university. Among his numerous writings the following are, perhaps, the most interesting to the general reader: *The Ueber die Zukunft unseres Volks in Amerika*; *Faust Studien*; *Zur Geschichte der Siegfriedsage*.

HENRY RAAB.

Henry Raab, a prominent teacher in Belleville, Ill., wrote to the author concerning his life work, in January, 1901:

What I have done for the introduction and extension of German instruction in public schools is confined to my work as teacher and superintendent of schools in this city. In the year 1857-58 I was a teacher in the elementary schools, and instructed only in English; the second year, 1858-59, I was allowed to teach German one hour a day, but the following year this permission was revoked.

In 1859-60, at my suggestion, German was introduced into the course of study from the fifth grade up to the high school, inclusive, and I was appointed as German teacher. Under great difficulties I taught four hours a week in each grade. Receiving no support from the class teachers, I became dissatisfied and requested a grade for regular instruction. From that time German was taught in the classes whose teachers understood the language. In this way German gradually received less and less attention until I agitated the subject by publishing articles in the local press during the years 1865 and 1866. I succeeded in having German taught in all classes by special teachers. After the death of the most deserving, Mr. George Bunsen, I was appointed superintendent of schools in Belleville. As many objected to German on the plea of the extra expense of special teachers, I arranged that a German teacher should have charge of every other class and teach German in both classes. Besides, I distributed the teachers so that children learn German a half hour every day during their first year at school. In all other grades German is taught one hour a day, and this arrangement obtains at present. * * *

My opinion is that teachers do not influence by their thinking, speaking, and composition, but by the way in which they conduct themselves with their pupils and colleagues and appear in public. Whenever it has been possible I have spoken German with teachers and pupils, have read the classics and German works on

pedagogics in German to English-speaking colleagues, and have always shown myself a German. I believe that I have done more in this way than by writing.

OTTLIE HERHOLZ.

Miss Ottilie Herholz, born in Thorn, Prussia, comes from a family that has followed the profession of teaching for two hundred years. She attended the high school for women, the normal school, and the University of Berlin. From 1872 to 1890 she taught in the public schools of Cincinnati. With the title of professor extraordinary she has since 1890 been at the head of the German department of Vassar College, Poughkeepsie, N. Y., an institution intended exclusively for the higher education of women.

HANS FROELICHER.

Professor Froelicher was born in Switzerland and studied in Munich and Zurich. In 1886 he graduated as doctor of philosophy at the latter university, and in 1888 was called to the Woman's College in Baltimore, where he first taught French. Since 1891 he has had charge of the German department, and has an able assistant in his wife, Dr. Frances Froelicher.

EMIL DAPPRICH.

Emil Dapprich was born in Germany and educated at the normal seminary in Usingen. In 1865 he came to Baltimore, where he taught at Scheib's school until 1875. From 1875 to 1882 he taught in the public schools of Belleville, Ill., and was subsequently made superintendent of public schools in Belleville and St. Clair County at the same time. When he was called to his present position of director of the German Normal School of Milwaukee, which he has held since 1888, the school board of Belleville had reason to regret the loss of the services of a faithful, energetic, and self-sacrificing teacher, and an educator of rare training of mind and heart.

KARL KNORTZ.

Karl Knortz, superintendent of German in Evansville, Ind., was born in Wetzlar, studied in Germany, and then went to London. In 1864 he came to America. While he was teaching at the school of the Seminar-Verein of Detroit he made a study of the Indian language in that district. From Detroit he was called to the high school in Oshkosh, Wis., in 1868, as professor of the German language and literature. In 1871 he went to Cincinnati, where he took charge of the German department of the city normal school, and in 1874 edited the fifth volume of the *Deutscher Pionier*. From there he went to Indianapolis, where he edited the German paper. Later he settled in Johnstown, Pa., where he officiated as speaker of the Free Congregation. In 1882 he went to New York, where he established himself as private teacher and devoted himself to literary work until he accepted his present position in Evansville.

Knortz is undoubtedly the most prolific German-American author, as the following list of his works shows:

Tales and Legends of North American Indians. Jena, 1871.

From the Wigwam, Old and New. Tales and Legends of North American Indians. Leipzig, 1880.

American Sketches. Halle, 1876.

From Trans-Atlantic Society; Pictures of North American Civilization. Leipzig, 1882.

Mythology and Civilization of North American Indians. Leipzig, 1882.

Capital and Labor in America. Zürich, 1881.

State and Church in America. Zürich, 1882.

Pictures of American Life; Sketches and Diary Notes. Zürich, 1884.

- The North Pole Travels of a German Sailor; William Nindemann's Recollections of the North Pole Expedition of the *Polaris* and *Jeannette*. Zürich, 1885.
- Longfellow; A Literary Study. Hamburg, 1879.
- An American Shakespeare Bibliography. Boston, 1876; second edition, 1877.
- Shakespeare in America; A Literary Study. Berlin, 1882.
- American Poems of Modern Times. Free translations. Leipsic, 1883.
- Modern American Lyrics. Leipsic, 1889.
- Two American Idyls: Elizabeth, H. W. Longfellow; Snow Bound, by J. G. Whittier. Translated. Berlin, 1879.
- Longfellow's Hiawatha. Translated and explained, with introduction. Jena, 1872.
- New Poems. Glarus, 1884.
- Humorous Poems. Baltimore, 1877; Glarus, 1889.
- Songs and Romances of Old England. Köthen, 1872.
- Scottish Ballads. Halle, 1875.
- Epigrams. Lyck, 1877.
- New Epigrams. Zürich, 1884.
- Representative German Poems; Ballad and Lyrical. German text with English translations. New York, 1885; second revised edition, 1889.
- Goethe and the Werther Period, with the Supplement, Goethe in America. Zürich, 1885.
- Irish Tales. Zürich, 1886.
- Brook Farm and Margaret Fuller. Lecture. New York, 1886.
- Walt Whitman. Lecture. New York, 1886.
- Gustav Seyffarth; Biographical Sketch. New York, 1886.
- The Life and Works of Gustav Seyffarth. New York, 1886.
- Nokomis Fables and Tales of North American Indians. Zürich, 1887.
- Songs from a Foreign Land. Free translations. Glarus, 1887.
- History of North American Literature. Two volumes. Berlin, 1891.
- Hamlet and Faust. Zürich, 1888.
- German National Songs and Tales, with the Supplement, National Songs of Yorkshire. Zürich, 1889.
- Whitman's Leaves of Grass. Selected translations. 1889.
- How He Fell in Love with His Wife. An American story, by E. P. Roe. Leipsic, 1889.
- American Tales of Crime. Vienna, 1890.
- Rome in America. Zürich, 1891.
- The American Sunday. Zürich, 1891.
- A World Outlook in Quotations. Leipsic, 1892.
- The Christian-Communitic Colony of Rappists in Pennsylvania. Leipsic, 1892.

V. EFFECT ON THE RELATIONS BETWEEN GERMANY AND AMERICA.

The visit which the German ambassador, Dr. von Holleben, paid to the German department of Harvard in the middle of March, 1899, did not fail to excite the attention of all the universities in the country. It was considered most desirable that Germany should receive more than occasional information of the extraordinary efforts made in so many places in the United States to cause the German language, literature, and science to become the common possession of all the educated, and of what positive results these efforts can show. The consequence was that several of the leading universities in succession invited the ambassador from Germany to visit them and become acquainted with their arrangements.

The first institution to approach the representative of Germany in this matter was the University of Chicago.

It is most becoming [the invitation dated June 3, 1899, reads] that American universities should strive for the honor and privilege of expressing the esteem

which the American people in general feel for the German Government and the German nation. Universities are specially called upon to acknowledge the influence of Germany on the educational system of the United States, and it must be furthermore acknowledged that Germany has, either directly or indirectly, promoted all undertakings of universities in this country. Americans honor Germans for their pioneer work in the advance of industry, art, science, civic virtue, and religion. We approve German military excellence, and we approve still more highly the successful efforts of Germany to maintain peace.

American universities cultivate a patriotism that is founded on the conviction that American institutions are best for Americans. Still, without being untrue to their duty, they are disposed to help all Americans to know and honor other nations. It is of special importance just at present that the fact should be generally known that the efforts toward civilization made by Germany and America are essentially the same.

American universities are more especially called upon to promote a sincere understanding between Germans and Americans on account of their close race relationship. This relation has been firmly established by a long, unbroken friendship and by the large number of loyal American citizens who claim Germany as their home, as well as by the interest manifested on the part of Americans for the union of Germany and its brilliant success in being recognized as one of the great powers of the world.

In his reply, dated June 29, 1899, the German ambassador said:

Surely no place can afford a better opportunity for becoming acquainted with the national spirit of a people than a university, the school of moral and scientific education, the birthplace of new ideas, and the center and battlefield of intellectual intercourse.

The meeting held January 24, 1900, was in accord with this promising prelude. All the representatives of the university vied with one another in their expressions of gratitude for what they owed to Germany during their school course and subsequent literary pursuits. As the speeches delivered on this occasion have more than a temporary significance, the most important are quoted. The proceedings took place at 3 o'clock in the afternoon in Kent Theater, and the attendance was so large that no seat could be obtained after 2 o'clock. The stage, on which seats were arranged for the faculty and their guest of honor, was decorated with the German colors and the Stars and Stripes.

President Harper delivered a short address, in which he referred to the custom of the university occasionally to invite prominent men at home and abroad to visit the institution, and that the present meeting was held to greet one of the most distinguished foreigners in the United States as a guest of honor of the university. Prof. J. Laurence Laughlin delivered the address of welcome to the representative of Germany, as follows:

PROFESSOR LAUGHLIN'S ADDRESS.

We are pleased to offer your excellency a sincere welcome to our university, not only because we gladly honor those who are honored by their own nation, but because you represent the majesty and the influence of the great German Empire in its relations to our beloved country, and because in you is placed the trust to separate the chaff from the wheat in the varying expression of national sentiment on the part of the inhabitants of the United States.

This will be a happy occasion if we are permitted to give the reasons why our permanent conditions of life necessarily seem to assure fraternal relations with Germans. The fundamental characteristics common to Americans and Germans should ever tend to peaceful relations and a sincere understanding.

We do not forget that English and American institutions are of Teutonic origin, and we can not forget the blood relationship. The institutions established in central Europe by the ancient Germans are still preserved in America under different forms. Our "commons" follow a custom that originated in the German "mark." The "mote" of the free Germans was a precursor of our "town meetings," in which our political life was originally rooted. In our whole legal procedure, our apprehension of law, and our strong manifestation of self-help we find the evidence of the survival of our Teutonic ancestors' sense of law. Americans and Germans grasp hands to-day and greet one another as successors of the same forefathers, not

as strangers, but as friends; not as different races, but as members of the same large family.

When a son leaves his parents' house to settle in foreign parts, he in the course of time adopts the expressions of his new surroundings; he develops new capabilities and has new desires, but in his inmost soul the elementary forces of his extraction continue to operate. If we take the old steel sword that hangs over an ancestor's portrait and convert it into a plowshare it will remain good steel and cut the field of the farmer as well as it cut wounds when held in the hand of the warrior.

Our present condition and our successes on the new continent are an evidence of the excellent political and administrative characteristics of the Teutons. We Americans have attained a power that must be heeded by other nations, because the only successful colonies of modern times are those founded by the Teutonic race. Strong in hope and self-government, a body of Teutons wander to find a new country, and by virtue of their innate regard for self-government they choose a leader and at once set zealously to work to conquer forest and field. The moral responsibility of citizens toward the state, their apprehension of law, their highly developed capabilities for administration make this race particularly qualified for the colonization of new countries. It is therefore only a consequence of natural talent in the English, Germans, and Americans that they are directing the different successful colonies of the present day; in the fulfillment of this task they are unequaled by any other race.

We must not forget that when our forefathers sought this country to found a new state in which freedom could prosper and religious freedom find a place of refuge, they were assisted by the Germans. The influence and strength of the German colonies can not be overestimated. The State of Pennsylvania, with its predominant German population, still preserves the elements which characterized its power during the Revolutionary war so forcibly. A great and important part of our Union was so colonized that German ideas of public and private duties penetrated the very heart of our institutions. The carefulness, prosperity, conservative mode of thought, and deep penetration of our German brethren have contributed much toward our growth. Where the Huguenots, Puritans, Dutch, and English are celebrated in the early history of our country, the teacher of history who knows something of Mühlenberg and other participators in the vital drama of the colonies will place the importance of German influence close by that of English. We began our existence together with German brethren, worked side by side with them in forming our nation, and we are glad to acknowledge our obligation to them. In no other great crisis of our more recent history have we gone to battle or council without standing side by side with German brethren.

He who has made but a superficial study of history may endeavor to arouse seemingly just prejudices between Germans and Americans by calling to mind the Hessians that were employed by Great Britain in her effort to oppress the colonies. The story has been repeated to Americans too often, and they were not told how the misery prevailing in the weak German States, at that time, made it possible for the rulers to sell peaceful shepherds for the purposes of war. The strong and intelligent part of Germany was not at all implicated; on the contrary, we received great assistance from the strongest State. Frederick the Great was secure on his throne and could judge aright. He was above the influences to which weaker rulers yielded, and consequently the young nation found in one of the former rulers of the central state of the present German Empire the best of friends. As we gratefully remember, it was Frederick the Great who concluded the first treaty with us after the Revolutionary war. When he was requested to allow the Hessian mercenaries to march through a strip of his territory, it was quite natural for him to give the dry, humorous reply: "Yes, but I should receive the cattle tax for them at least."

Nor can we forget De Kalb and Steuben, who endured want and the dangers of war out of devotion to our just cause. It is being more and more clearly proved that Washington prized Steuben especially as an experienced officer and drill-master, who transformed our militia into an excellent army. He was a welcome assistant in the forming of our young nation.

In later history we find ourselves under obligations to a number of Germans misjudged in their native country. About 1849 there came over to us Germans of excellent education and ability, men adapted for leadership, who possessed a thorough knowledge of their moral responsibility to their adopted country, and exerted a far-reaching influence on our national life. * * *

It is not a small matter to formulate the relationship between Americans and the 5,000,000 Germans who have made this country their home; some evil together

with much good has come over with them. We naturally speak of our English extraction and our limited connection with the mother country. It is limited, and we hope that the future will not make it more so, but we must not forget that we never have had any direct, strong influx of English blood. Since colonial times we have not had any important immigration from England, whilst no nation can ignore the weighty influence of a strong immigration such as our country constantly receives from Germany. The infusion of German blood into American life is an important political and social factor. For this reason Americans are better acquainted with the habits and customs of the Germans than those of the English. The result of these influences on our domestic and foreign relations can not easily be foretold nor can a low value be set on them.

Our material and political relations to Germans are important, it is true, but we are in much closer intellectual and spiritual union with them. Spiritual affairs are much stronger than agreements and political combinations. There is no American university that has not been inspired by German intellectual activity. We have visited the halls of German universities in numbers and kindled our lamps of knowledge at their altars. Love for truth and the holy incentive to knowledge and poetry Americans have found in Heidelberg, Göttingen, Tübingen, Bonn, etc. When we look down upon the red roofs and towers of Göttingen as upon the red flower of wisdom, encircled as it is by ancient lindens, we not only see the student quarters of Bismarck, but also the places where Bancroft and Longfellow buried themselves among their books. Of course, German universities were not the model of ours, but we adapted the spirit of their knowledge to our conditions.

As a university we therefore offer a sincere welcome to you, because you represent a nation that has given us scholars, poets, and musicians, and in the name of the brotherhood of knowledge we extend a greeting to it through you. Our indebtedness to German science is great: we can not pay it back. In the surrounding buildings appropriated to biological research the great German physiologists, Louis Helmholtz and John Müller, are honored as the fathers of their science. The brilliant successes of Liebig, Robert Bunsen, and other scholars have excited the greatest admiration from all who have directed the work in the building in which we are assembled. Germany is prominent in nearly all branches of scientific work; I need only recall Wundt, Fechner, Herz, and Röntgen. Her poets and authors are known in every American household; and we are particularly indebted to Germany for music, as Germans have done most to arouse an interest in music in the United States.

Stronger than written contracts and deeper than the desires of ambitious men are these elements of intellectual and spiritual life, in which the highest types of mankind in both countries are united and which bind us by ties that fire and sword can not separate. Child, parents, and grandparents—America, England, and Germany—united in loyalty to science, literature, and art; united in the desire to perpetuate works of peace and justice; united in the effort to keep the world free from war; united not by words, but by the closest family ties, may we live and prosper in such union.

The passages in which the speaker referred to the friendly relations between the United States and Germany were enthusiastically applauded.

The introduction of the German ambassador by Dr. Harper was the signal for a storm of cheers from the students. The band played the "Die Wacht am Rhein," after which Dr. Von Holleben spoke.

DR. VON HOLLEBEN'S ADDRESS.

To-day is not the first time that I have the pleasure of addressing an audience in Chicago. That beautiful June day, six years ago, when the wonders of the World's Exposition were a delight to all, is distinctly before me now. It was German Day, and the platform on which I stood was built on the shore of your glistening lake. Many thousands crowded into the German building, and the friendly voice of the late Carter H. Harrison still rings in my ears as he told me that he was mayor of the largest German city in the world, next to Berlin and Vienna. It was my pleasant duty on that day to express Germany's greeting to you. At the time I spoke of the great sympathy and true admiration with which the German nation is following the grand development of this country. I thanked you for the cordial reception extended to German exhibitors and German immigrants. My heart was filled with gratitude and pride because of the part taken by my native country in the Exposition. After the splendor had faded I wandered through the deserted streets of the White City and asked myself

the question: What is the greatest and noblest exhibit of my country? Magnetism drew me to that suite of quiet rooms in the palace of industry, visited by comparatively few, those twelve rooms that contained the exhibit of German universities. The collection represented the energy, knowledge, and life work of the greatest German scholars, and I felt that it represented German national life and German ideas most completely and gloriously.

Years have passed since, and the White City has become a dream of the past. My official duties called me far away from the United States; but since I have returned I feel called upon to direct my steps to the great educational institutions which are the embodiment of the noblest and highest efforts of nonpolitical national life. Thus I have come to you, and I do not regret it. Nor do I regret that my desire to know all of your great universities will compel me to undertake long journeys. Like you, we Germans do not think much of concentration of scientific research. It is often unjustly asserted abroad that the University of Berlin ranks first among German universities. That is not the case. We have no scientific Mecca, as the French possess in Paris, and we desire none. All German universities have the same facilities and follow the same purposes. I must confess that foreigners are attracted by the difference between your universities and ours. That difference is partly referable to the result of historic causes and partly to the principle, defended with so much spirit by Americans, of meeting the demands of modern science in as comprehensive a measure as possible, independent of local conditions.

What makes it difficult for foreigners to form a clear comparative judgment of your universities is the circumstance that they work with much greater helps in the form of colleges which about correspond in rank to the German gymnasiums. What fills us with admiration, however, is your practice of opening the doors of your universities to both sexes alike. We admire your generosity which enables teachers to spend their vacations at other educational institutions, so that their pupils may profit by the fruits of their study. We admire the number of popular lectures. We admire the method of controlling students' knowledge by frequent examinations, and thus inciting them to new effort, and the carrying into effect of the principle that teachers should be in direct personal contact with pupils.

I frequently hear abroad that German universities do not care to modify their character according to modern needs. This is not so. "University extension" has been introduced at different German universities; and at the present day, when one of the largest Eastern universities is hesitating to confer the degree of doctor on a woman, almost every German university has at least one woman doctor.

It may be true that students profit by restrictions during their academic course, but we Germans can not forget what influence this period of free academic life has had on the subsequent career of our greatest intellectual heroes. At all events, we Germans are following the development of your universities with attention, and a common intellectual tie binds German and American universities. Both are devoted to the investigation of the sciences in their highest form of expression, and the best scientific work is being done in the universities here as in Germany. It is not so in England and France, where scholars who are not teachers of the highest educational institutions of the country are doing the most scientific work. In Germany and America the principle obtains that the productive scholar is the best teacher. Here, as at German universities, the main stress is laid upon individual scientific research, and here, as in Germany, universities impress their characteristic mark on the life of the nation. In the universities of America the same spirit is cultivated and harbored as in those of Germany, and two nations united by the bond of generations of educated men can not do otherwise than harbor and cultivate the most friendly and cordial mutual relations. So long as this bond exists neither I nor any of my successors in Washington will ever be placed in a position to deliver other than messages of peace and sincere friendship from one country to the other.

One of the toasts upon the occasion, "University life as a common bond," was pronounced by Prof. C. von Klenze with great energy. After stating that no country on earth had contributed more to the progress of human culture than Germany, he went on to say that German ideas and scientific principles in American university life had gained the ascendancy over English traditions, which naturally preponderated twenty-five years ago. "Germany was the first to develop the principles which have become the common possession of all scholars and

unite those of all countries by a common tie. These principles bear a distinctly German mark impressed upon them by the intellectual integrity which is the chief feature of German national life. If Germany has gained this merit, America may claim for herself to have been the most willing to accept the principles developed by Germany and to have applied them most thoroughly, although they must have seemed unusually strange to American universities at first. In this way a new bond has been established between the two nations that will unite all men who devote their lives to scientific research. Each nation thus tills its own field and cuts its own stone for the great palace of a new civilization. When the first happy day dawns on which mankind can dwell in this palace that will have cost so much effort to build, Germany, which laid the firm foundation of the splendid structure, will be remembered."

This concluded the serious addresses of the day which has inaugurated so important an epoch in the history of the relations between Germans and Americans. By this visit of its representative, Germany has proved that it takes the same solid interest in the existence and further development of American universities that is manifested by all civilized nations toward the maintenance of institutions of culture, and recognizes in them institutions deserving of the same general esteem as the much older German models. Ambassador von Holleben has also visited the Johns Hopkins and has accepted an invitation from the Columbia University, New York, for April of the current year (1901). His experiences have left so favorable an impression upon the illustrious visitor, that he feels it incumbent upon him to continue his visits to institutions of learning. These events have likewise contributed, most undoubtedly, to strengthen the friendly relations between the two nations and have tended to promote the study of German in America, as well as to increase the number of American students in Germany.

In conclusion, we may briefly state that in recent times the same effort has been manifested in Germany to promote the study of English as has been made in America to advance the study of German. The fact, however, is not referable in the same degree to the better judgment of educators, since men like Professor Paulsen, of Berlin, by no means recognize its educational merit, but to the personal initiative of Emperor William II, who realizes the importance of English for commercial purposes and does not wish to see it sacrificed to the Greek "fetich." German students are learning English with the same zeal as Americans are pursuing the study of German, and the inevitable result must be that the two nations will understand and esteem each other better.

CHAPTER XV.

THE FIRST COMPREHENSIVE ATTEMPTS AT CHILD STUDY.

Topical outline.—Introduction—Report of Berlin Pedagogical Society: A. Circular letter—B. The questions submitted—C. Criticism of the returns—D. Mode of procedure—E. Classification and analysis of the concepts—F. Criticism of appliances for teaching—G. Historical ideas—H. Accomplishments acquired at home—I. Propositions for further procedure—J. Supplement: Results of subsequent inquiries at Plauen and Annaberg.

INTRODUCTION.

Early during the nineteenth century individual attempts were made in studying children with a view toward finding a solid basis for the science and art of education. Rousseau and Pestalozzi had given an impetus to a study of children's mental as well as physical actions and motives of actions. A little book entitled *Record of Infant Life*, by D. Tiedemann,¹ appeared in Germany about a hundred years ago. It was a mere fragment, but served the useful purpose of pointing out the way for others to work in practical psychology. During the middle of the century child study, or rather child psychology, as the Germans term it, became a most interesting subject to students of education in Germany.

In 1864 Professor Stoy, of Jena, began to subject the pupils of the practice school connected with his seminary to an examination which was intended to reveal their intellectual status, i. e., would show for what kinds of knowledge these children had an interest and how reproduction of the matter learned proceeded. His intention was laudable, but, though the investigation was continued for some time, the results were never published.

The second attempt, eminently successful in its results, was made in Berlin.

In Berlin the teachers had for many years arranged for regular courses of lectures for their own advancement, and during the winter of 1867-68 listened to a course of lectures on educational subjects read by Prof. O. Willmann, professor of pedagogy and philosophy, one of the foremost psychologists of his time. These teachers subsequently studied and reviewed his book, in which he had collected these and similar lectures. This led to the suggestion to investigate the minds of children newly received in school at the age of 6. The suggestion fell upon fruitful soil and resulted in the first attempt at examining children "en masse" as to the contents of their minds. It was

¹Translated by F. L. Soldan, superintendent of schools in St. Louis. Bardeen: Syracuse, 1890.

the purpose to find out what these children knew before the influence of school instruction began. The results of this attempt will be found below.

Since then many like en masse attempts have been made for a variety of purposes by medical men like Axel Key, in Norway, to investigate the physical conditions of growth; by Dr. Kotelmann, of Vienna, to establish the fatigue curve; by Prof. W. Preyer, to determine the stages of intellectual growth; by Dr. Berthold Hartmann, to analyze the juvenile contents of the minds of school children in the city of Plauen, Saxony; by Dr. T. L. Ziehen, to show the association of ideas in children; by Paul Möller, to diagnose weak-mindedness, and in late years by others, especially in the United States, where the psychology of children has become a favorite study of teachers.

The teachers of the city of Berlin referred to carefully analyzed and summarized the mass of information received from various city schools and published the results in the city yearbook of 1870, where they lay almost forgotten and neglected for over thirty years. It seems very desirable to rescue this report from oblivion and render it in English for several reasons, chief of which is the thorough treatment and method of procedure of the investigators.

The following is the report of the teachers of Berlin:¹

THE CONTENTS OF CHILDREN'S MINDS ON ENTERING SCHOOL AT THE AGE OF 6 YEARS.

[Translated from "Städtisches Jahrbuch, Berlin und seine Entwicklung," volume 4, 1870.]

A. CIRCULAR LETTER.

The Pedagogical Society of Berlin issued in October, 1869, the following circular letter addressed to all the school principals of the city:

GENTLEMEN: During the August session of the Pedagogical Society, a discussion of Dr. Willmann's book, entitled "Pedagogical lectures on elevating the intellectual activity through instruction," led to the resolution to propound certain pedagogical questions, the solution of which will essentially contribute to the development of the schools, if the questions be framed with especial regard to the urban conditions characteristic of Berlin.

Since it has been admitted by educators of the most varied views that education and formative instruction are out of the question so long as the individuality of the pupil is not known, we propose, as a first task, to ascertain the individuality of the little boys and girls just entering the lowest grade of our Berlin elementary schools, so far as it rests upon the ideas they have acquired of their environments.

It is an undeniable fact that the average individuality of the child in a metropolis, hence also in Berlin, is a different one, in consequence of the influence of his surroundings, from that of a child living in a rural district or in a small town. It is also a fact that the conditions of the various parts of the city exercise different influences upon the individuality of children, in consequence of which the mental receptivity of children of different wards shows a noticeable inequality. It is not at all impossible to investigate the causes—at least partly—to which this dissimilarity in the pupils on the one hand and similarity on the other may be traced.

As is seen from the wording of the task proposed, it is at first only one aspect for which your attention is enlisted, to wit, the individuality as it appears influenced by the ideas it has acquired about its surroundings. Of course, from this information safe conclusions may be drawn as to peculiar natural endowments of the Berlin children in general.

¹ It is but just to state that the statistical work shown in the following tables was performed by Professor Bartholomäi, member of the statistical bureau of the city of Berlin, and for many years editor of the mathematical part of Lüben's Jahresbericht. (Translator.)

In order to obtain a basis necessary to ascertain the individuality of the Berlin children, we take the liberty of requesting you to send in replies to the subjoined questions. The results of our mutual work would not only serve the important purpose mentioned, but also may form the beginning of a kind of educational statistics hitherto not in existence.

The selection of the questions to be submitted to the children was not easy. To many they may seem strange, especially the questions concerning natural objects; for instance, it may sound odd to ask, "How many of you children have seen a rabbit running free in the country?" The concept rabbit, as such, has no more significance for our purpose than many other concepts. The answer to the question, however, becomes of value by ascertaining whether the child has seen the animal run free. If this be the case, it is safe to conclude that simultaneous with the idea rabbit the child has acquired a whole group of other ideas, about whose degree of clearness the replies to following questions will give the desired information.

With reference to the bearing of this attempt to ascertain the concepts of the Berlin school children and the conditions influencing their ideas, a few words may be added. The first group of questions, for instance, is intended to ascertain whether the supposition is correct that the child of a metropolis notices, more often than has been assumed, things moving in nature, while his ideas or concepts of things in repose remain indistinct or blurred, sometimes till the end of his school life; hence that his interest, in many cases, can not be easily awakened in things in repose. If this should prove true, many apprehensive phenomena in the life of the people of Berlin might be explained, and from the facts ascertained a suitable method in instruction and training in school may be devised to counteract these critical currents in the life of the people.

A similar purpose is aimed at by such questions as "How many children have an idea of a birch, oak, or pine tree standing in the woods?" Experience speaks for the supposition that the Berlin child, if indeed it has observed the woods frequently, comprehends with especial interest quite different ideas of the woods than the country child, hence that the totality of the idea of woods is an entirely different one in the city child from that in the country child.

By means of this fact may be explained the observation made by teachers in city schools, namely, that rural children having moved into the city are often, at their entrance into the city school, far behind their city-born schoolmates of similar age, but that they surpass them within a short time. Perhaps this is caused by the fact that the appliances for object lessons (charts, pictures, etc.) prescribed by the authorities, and used all over the Kingdom, are designed chiefly for rural schools and schools in small towns, and fail to consider the environments and conditions of life of the children of a large city, hence appeal preferably if not exclusively to the ideas of the rural children.

That the investigation proposed for the purpose of a statistical summary will lead to surprising results, is seen from some preliminary inquiries made to test the questions prepared. Thus, for instance, the children of an upper grade in a girls' school were asked what mountains or hills they had seen. All, without exception, mentioned the Pepperhill (Pfefferberg), a beer garden situated on the point of a little knoll in the neighborhood of the school. Some also mentioned the Kreuzberg and the Windmühlenberg as having been seen. A few questions revealed the fact that all these children thought a place of refreshment, or a beer garden, a characteristic quality of the idea hill or mountain. How this association of ideas, easily explained by local circumstances, will make it difficult for these children to comprehend song texts, selections for reading, lessons in geography, etc., in school is obvious. In another class room, in a school near the Rosenthaler Gate, 80 per cent of the pupils between 11 and 13 years had never seen the Friedrichshain (a well-known grove-like park). 50 per cent had no idea of a forest, a park, a meadow, etc., other than that which they had acquired on a visit to the zoological garden made in the company of their teachers. These children are lacking, almost up to the time they leave school, a large number of those concepts which must be presupposed in the instruction in geography, nature study, singing, and language, ideas upon which the teacher has to base his instruction.

Now, if similar results be discovered in the majority of schools in Berlin, as may be supposed with certainty, there will arise the necessity of special tasks for primary language and object lessons, and for lessons in reading and writing; also for a utilization of the walks to the zoological garden and the museums customary with our schools; for a preparation of local and foreign geography, the selection and treatment of song texts, reading matter, the study of natural objects and laws, and the proper acquisition of appliances for these branches.

Concerning the much-talked-of kindergarten,¹ no definite verdict can be an-

¹ The reader is reminded of the date of this letter: 1869.

nounced before the differences in the individualities of the children having attended it and of those reared in the family exclusively have been statistically ascertained.

We are fully aware of the difficulties and obstacles which will have to be overcome in getting replies to our questions, but we are convinced that you gentlemen will gladly undertake the arduous task in view of the supreme value which such pedagogical statistics will have in future for each separate school and the whole system of city schools of Berlin.

This hope has been reenforced by the fact that all those colleagues, principals, and class teachers who have heard of our intention have given their consent gladly and will attempt to obtain replies to our questions. But the more schools which comply with our request the more complete will be the statistical summary.

A personal participation on the part of the senders of blanks filled out in the deliberation of their disposition and of their summarization is particularly desired. Our work may be made more valuable by explanations of colleagues not members of the society. A special invitation to the meetings of the society will be sent to all who have forwarded returns. All summaries will be published. Circulars filled out should be sent in no later than January 15, 1870.

The PEDAGOGICAL SOCIETY,
R. SCHOBERT, *President*.

OCTOBER, 1869.

B. THE QUESTIONS SUBMITTED.

The questions proposed to be submitted to the children refer to the existence or nonexistence in their minds of the following concepts:

1. Rabbit running free, squirrel on a tree, grazing flock of sheep.
2. Stork on its nest, floating swan, hen and its chicks, call of a cuckoo, song of a lark in liberty.
3. Hopping frog in liberty, fish swimming in river.
4. Beehive, butterfly on a flower, snail creeping in garden or field.
5. Birch, pine, and oak tree in the woods, willow on the edge of the water.
6. Toadstool and moss in the woods, wild flowers.
7. Hazel and huckleberry bush in the woods, reeds on the banks of a pond.
8. Sand pit, turf or peat pit.
9. Thunderstorm, dew.
10. Moving clouds, hail, sleet.
11. Rainbow, evening and morning red.
12. Starry sky, phases of the moon, sunrise and sunset.
13. Dwelling place (address), the Lustgarten, Unter-den-Linden, Wilhelmsplatz, Alexanderplatz, Gensdarmenmarkt, Brandenburgerthor, the King's castle and the palace, museum, arsenal, city hall, place of refreshment, Friedrichshain, Thiergarten, zoological garden, botanical garden, Kreuzberg, Hasenhaide, Invalidenpark,¹
14. Suburbs of Berlin, such as Treptow, Stralau, Rummelsburg, and Tegel.
15. Ride in a boat, on a railroad, range of mountains, ocean.
16. Mount or hill, forest, meadow, lake, river, grain field, potato field, snow-covered landscape.
17. Village, plowing, harvesting, windmill.
18. Triangle, square, circle, cube, sphere.
19. The numbers 2, 3, 4, etc.
20. God, Christ, biblical stories, prayers, hymns, church service.
21. Name and profession or occupation of father.
22. King, coins, monuments of the Great Elector, Frederick the Great, the Victory column.
23. Fairy stories of Snow-white, Red Riding Hood, Sleeping Beauty, Cinderella.
24. How many can pronounce correctly words told them?
25. How many can recite a memorized poem?
26. How many can sing a song?
27. How many can repeat a musical tone sung?
28. How many have attended a concert?

¹ Mostly well-known Berlin localities.

That these questions solely touch upon the individuality of the children is plain from the wording of the circular letter.

This attempt at fathoming the contents of the minds of children newly entering school was heartily approved by the city school authorities, and authority was granted to submit the questions to all the schools. (Names of schools and their principals appear in the original account, but are here omitted as unessential.)

Of the 84 reports which were sent in, 13 proved to be absolutely worthless and were laid aside. New questions were suggested, such as:

1. How many of the children have brothers and sisters?
2. How many have lost their father and mother?
3. How many have house inmates, such as a servant or apprentice?
4. How many have domesticated animals, such as a dog or a cat?
5. How many have a bird?
6. How many know the colors blue and red, white or variegated?
7. How many have seen a shoemaker, joiner, mason at work?
8. How many have seen a watchmaker, printer, painter at work?
9. How many have seen soldiers, farmers, sailors?
10. How many have seen a peddler, a negro?
11. How many know how bread is made of grain, or how stockings are made?

The difficulties of the inquiry arose partly from the absence of some children, partly from the unavoidable circumstance that the last questions on the list did not come to the children before weeks and months had passed, and that it was, therefore, impossible to determine whether the knowledge the children were found to be in possession of was gained in school or whether it was in their possession when they entered school. The large number of questions also made it impossible to exactly ascertain whether the concepts expressed by words had actual lodgment in their memory.

The various teachers reporting mostly refrained from making comments. A few may be of interest to be quoted. One principal found only one child who could recognize an oak, a birch, a willow, a toadstool, moss, a hazel bush, a huckleberry bush, and reeds. And it was always the same boy, namely, the son of a clergyman, who had passed two years in succession on the farm of his uncle. None of the children knew the difference between hail and sleet. Another teacher discovered that some children who claimed to have seen a lake meant a fish tank in the market.

C. CRITICISM OF THE MATTER RECEIVED.

Considering the difficulties mentioned and the resultant differences in the degree of accuracy of the inquiry, it was to be supposed that the matter in reply to the circular letter could not be worked into reliable summaries. This opinion was candidly expressed by a lady teacher (Miss L'Hiver), who wrote:

I deny that the numbers found in footing up the returns have any value whatsoever. The reasons are these: To ask 138 questions of 26 children gives a total of 3,588 questions. (Only 14 children were to be examined at a time, but should the remaining 12 keep silent meanwhile?) Two conversation hours per week, at 50 minutes each, give in a term of 3 months, or 12 weeks, 1,200 minutes, or one-third of a minute for each question. If the children's replies are to be used as a foundation for statistical conclusions of any kind, each child would have to be asked a number of other questions to establish the conviction in the teacher that the child had not merely, parrot-like, repeated the replies of others, or that he had been mistaken. (Thus, for instance, I found that most of the children who claimed to have seen a rabbit running free had meant other animals seen in liberty.) Or, that the child had not acquired the ideas in question before, but during his school days.

For such an examination [the lady concludes] a teacher can find no time, and a superficial examination has no value whatever. I therefore do not share the hopes entertained in summarizing the returns.

Similar remarks accompanied other returns. These objections were reenforced by the character of the returns, for those which were not absolutely rejected for obvious reasons could be divided into two classes: (1) Those which revealed sus-

picious indications of the fact that older pupils, having attended school for some months, had been drawn into this examination; (2) those which were absolutely above suspicion. There had been examined:

Coming from—	New pupils.			Pupils possibly mixed with older ones.		
	Boys.	Girls.	Total.	Boys.	Girls.	Total.
The family directly	471	302	773	465	412	877
A kindergarten	83	44	127	-----	28	28
Institutions for keeping young children during work hours, so-called crèches.....	114	71	185	128	120	248
Total	668	417	1,085	593	560	1,153

We have, therefore, reliable material of only 1,085 cases, if all possible errors, the sources of which have been stated, be eliminated. The question arose whether that number could be utilized to form satisfactory averages, especially whether the number of children having attended the kindergarten or crèches (127 and 185, respectively) was not too insignificant for comparison.

Mathematics does not at once reject inaccurate observations, but often derives reliable results from them. It was therefore decided to use not only the 1,085 returns of cases which were perfectly reliable, but also the 1,153 which were slightly suspected, and the result of the calculation justifies this action.

D. MODE OF PROCEDURE.

The main question is: What value is to be placed upon these numbers? It may be presumed at the outset that the teachers have added correctly. Erroneous replies on the part of the children have their origin either in imagination, wrong perception, or in embarrassment and confusion. In cases where fancy or error was active the reply is affirmative, while embarrassment or confusion is likely to have caused a negative reply. But, on the whole, it may be assumed that the Berlin children are not troubled with embarrassment, and, furthermore, that a teacher, unless he be a bungler, will overcome the children's shyness in a very short time; hence erroneous replies arising from childish embarrassment need not be expected. This opinion is strengthened by the remarks of a teacher, who says "It was noticed that when the queries were submitted to the whole class nearly twice as many children would claim to have the idea asked for than when they were questioned in small sections of eight or ten in order to test the correctness of their answers."

The summaries show two things: (1) how many of the children have a definite idea of the objects mentioned, and (2) how many lack the idea. The former may be considered the maximum limit, the latter the minimum limit. Of course, each one includes doubtless a scale of possibility and probability, but that must be left out of the consideration. Thus, for example, the replies to the fifty-fourth question concerning the phases of the moon, show that of 471 boys and 302 girls newly entering school, at most 264 boys and 179 girls coming directly from the home, at most 66 boys and 33 girls coming from the kindergarten, and at most 63 boys and 38 girls coming from crèches, had an idea of the phases of the moon. These are classed among the numbers expressing a maximum or affirmative reply. In answering to question 65, it was found that at least 35 boys and 49 girls coming from home, etc., had either not been in the "Lustgarten," "Unter-den-Linden," or if so had forgotten it, or failed to connect their concept of these places with the names they heard from the teacher's lips. This statement belongs to the rubric of minimal numbers or negative replies.

In order to obtain larger numbers we shall add together the two groups of freshly entering children and of children mixed with some who had some schooling. The totals will retain their original significance, only the limits of maxima

and minima are displaced in the direction of their own meaning. Doing so, we find these totals:

Preparation.	Boys.	Girls.	Totals.
Coming from home.....	936	714	1,650
Coming from kindergartens.....	83	72	155
Coming from crèches.....	242	191	433
Totals.....	1,261	977	2,238

Since the number of children having come from the kindergarten is too small to furnish sufficiently reliable averages, it is much to be regretted that a comparison between the boys and the girls in this class of pupils is made impracticable, and only that between the total number of boys and girls is attempted.

E. CLASSIFICATION AND ANALYSIS OF THE CONCEPTS.

The questions proposed refer either to direct observation and resultant concepts or to things historically transmitted or to accomplishments. We may consider first those which result from observation. From the list of these concepts we shall have to eliminate (1) those which can not be definitely classified. To these belong the hen and chicks, the picking of field, meadow, or forest flowers, the snow-covered landscape, the windmill; (2) those for which general observation is not possible, such as the beehive, sandpit, peat-pit, ride on the water or railroad, range of mountains, and ocean; (3) reiterations, such as occur in the mention of suburbs, as Stralau and Rummelsburg, likewise the Schlesische Busch and Tegel. Omitting all these in summarizing, we have left 75 ideas concerning the existence or nonexistence of which the inquiry may be determined.

The 75 ideas or concepts (*Vorstellungen*) may be classified in order to enable us to review special cases as follows:

A. NATURAL CONCEPTS.

I. *Mathematical*—Arithmetical: two, three, four; geometrical: triangle, square, circle, cube, sphere.

II. *Physical*—Astronomical: moon, sunrise, sunset, starry sky; meteorological: thunderstorm in daytime and at night; precipitations: dew, clouds, hail, sleet; atmospheric phenomena: rainbow, evening red, morning red.

III. *Natural history*—(1) Animals, (*a*) mammals: rabbit, squirrel; (*b*) birds: stork, swan, cuckoo, lark; (*c*) cold-blooded vertebræ: frog, fish; (*d*) insects and mollusks: butterfly, snail. (2) Plants, (*a*) phanerogamous: birch, pine, oak, willow, hazel bush, huckleberry bush, reed; (*b*) cryptogamous: mushroom or toadstool and moss.

IV. *Geography*—Mountain or hill, forest, meadow, lake, river.

B. HUMAN CONCEPTS.

I. *Topographical*—(1) Places or localities: Lustgarten, Unter den Linden, Wilhelmsplatz, Alexanderplatz, Gensdarmenmarkt, Brandenburger Thor; (2) buildings: castle and palace of the King, museum, arsenal, city hall; (3) landscape: Friedrichshain, Thiergarten, Zoological Garden, Botanical Garden, Kreuzberg, Hasenhaide, Invaliden Park; (4) suburbs: Treptow, Stralau, Rummelsburg.

II. *Agricultural*—Flock of sheep, field of ripening grain, potato field, village, plowing, harvesting.

III. *Family and home*—Street and number of dwelling, name and profession or occupation of father.

According to this grouping of the matter the following table is made, and in order to facilitate a comparison the numbers found have all been reduced to a basis of 10,000. This enables the reader to see at a glance the relative frequency or infrequency of the existence of the 75 ideas.

TABLE I.

Number of children in every 10,000 who possessed the concepts mentioned in second column.

No.	Concepts inquired after.	Boys.	Girls.	Children from home.	Children from kindergarten.	Children from crèches.	Children in general.
1	Two	7,478	7,360	7,436	8,323	7,113	7,435
2	Three	7,478	7,298	7,418	7,355	7,344	7,399
3	Four	7,279	7,247	7,224	8,258	7,067	7,265
4	Triangle	4,274	4,036	4,078	5,484	4,111	4,182
5	Square	5,424	5,537	5,230	7,484	5,681	5,474
6	Circle	4,750	5,312	4,818	6,645	5,081	4,991
7	Sphere	7,684	7,544	7,576	8,516	7,483	7,623
8	Cube	6,971	6,940	6,800	8,064	7,159	6,957
9	Moon	6,043	6,438	6,067	8,000	6,144	6,215
10	Sunrise	3,410	2,590	3,194	2,710	2,633	3,052
11	Sunset	4,925	4,237	4,739	4,516	4,226	4,625
12	Starry sky	8,382	7,840	8,012	8,645	8,476	8,145
13	Thunderstorm at day	7,613	8,209	7,776	9,226	7,760	7,873
14	Thunderstorm at night	3,188	3,509	3,224	4,194	3,510	3,347
15	Dew	2,331	2,395	2,455	2,323	2,032	2,364
16	Clouds	6,090	5,711	5,727	6,581	6,443	5,925
17	Hail	6,606	7,544	7,055	7,677	6,628	7,015
18	Sleet	2,847	2,037	2,382	2,194	3,025	2,493
19	Rainbow	7,708	7,851	7,667	9,355	7,598	7,770
20	Evening red	5,567	5,148	5,303	6,065	5,450	5,384
21	Morning red	3,497	3,715	3,545	4,128	3,580	3,592
22	Rabbit	2,482	2,446	2,473	3,097	2,217	2,466
23	Squirrel	3,878	3,193	3,170	4,903	4,665	3,579
24	Stork	3,212	2,467	2,897	3,290	2,702	2,887
25	Swan	6,757	5,425	5,976	7,032	6,628	6,175
26	Cuckoo	3,545	2,610	3,048	4,129	3,118	3,137
27	Lark	2,220	1,249	1,739	2,258	1,848	1,796
28	Frog	5,551	4,482	4,879	6,323	5,427	5,085
29	Fish	6,852	4,565	5,691	6,968	6,074	5,853
30	Butterfly	7,128	4,606	5,503	8,258	7,229	6,028
31	Snail	4,877	4,585	4,612	5,484	5,012	4,750
32	Birch	1,531	1,044	1,339	1,355	1,229	1,318
33	Pine	2,205	1,341	1,770	2,065	1,963	1,828
34	Oak	2,625	2,661	2,776	2,451	2,194	2,641
35	Willow	2,157	1,034	1,703	1,742	1,501	1,667
36	Hazel bush	1,055	706	927	1,032	762	907
37	Huckleberry bush	1,792	1,443	1,564	2,645	1,570	1,640
38	Reed	1,840	1,525	1,655	2,581	1,570	1,720
39	Toadstool	3,204	2,405	2,539	3,419	2,610	2,855
40	Moss	2,688	2,221	2,867	3,355	1,963	2,484
41	Lustgarten	4,021	3,654	3,800	5,032	3,672	3,681
42	Unter den Linden	6,122	4,903	5,436	6,129	5,982	5,590
43	Wilhelmsplatz	2,696	1,464	2,345	1,935	1,524	2,158
44	Alexanderplatz	4,084	4,729	4,515	3,935	3,946	4,366
45	Gensdarmenmarkt	3,450	2,221	2,915	3,032	2,811	2,309
46	Brandenburger Thor	3,885	2,968	3,388	4,774	3,303	3,467
47	Schloss (castle)	3,465	3,367	3,333	4,192	3,510	3,423
48	Palace of the King	3,180	2,508	2,788	3,613	3,002	2,886
49	Museum	3,450	2,927	2,982	3,935	3,880	3,222
50	Arsenal	2,165	1,689	1,855	2,839	2,032	1,957
51	City hall	3,703	3,501	3,412	5,935	3,557	3,615
52	Friedrichshain	3,600	4,258	3,915	2,710	4,203	3,887
53	Thiergarten	5,964	4,893	5,261	6,516	6,028	5,496
54	Zoological garden	4,346	3,685	3,727	6,323	4,503	4,057
55	Botanical garden	452	624	497	1,161	416	527
56	Kreuzberg	4,179	2,518	3,479	4,065	3,141	3,454
57	Hasenhaide	5,780	4,258	5,121	6,194	4,734	5,121
58	Invaliden park	1,301	922	964	1,355	1,709	1,135
59	Treptow	3,196	2,897	3,127	4,065	2,469	3,065
60	Stralau	2,840	1,955	2,515	2,387	2,240	2,453
61	Rummelsburg	1,459	963	1,248	903	1,359	1,242
62	Flock of sheep	4,005	3,695	3,739	4,323	4,203	3,870
63	Field of ripening grain	4,322	3,726	4,012	4,194	4,203	4,062
64	Potato field	6,265	6,397	6,303	6,323	6,397	6,323
65	Village	3,672	2,989	3,364	3,419	3,395	3,374
66	Plowing	3,283	1,801	2,570	3,290	1,656	2,636
67	Harvesting	2,744	1,883	2,315	2,323	2,587	2,368
68	Dwelling address	9,120	8,905	9,103	9,355	8,612	9,026
69	Name of father	8,136	9,007	8,830	8,065	7,483	8,517
70	Occupation of father	8,652	9,324	9,194	8,968	7,991	8,945
71	Mountain	3,402	3,050	3,067	4,645	3,441	3,248
72	Forest	4,036	3,142	3,655	4,194	3,418	3,646
73	Meadow	5,004	4,066	4,467	4,645	5,127	4,607
74	Lake	2,451	1,586	2,055	2,000	2,171	2,078
75	River	1,123	1,115	1,194	968	901	1,122

It may be supposed that, in general, those concepts or ideas are more easily gained which are found in a large number of children, considering the psychological conditions of the children and the possibility of acquiring the ideas under urban conditions, than such ideas as are possessed by a small number of children. This is the reason why in the following table (Table II) the ideas have been grouped according to the frequency of their occurrence among the children examined. This table also shows the excess of frequency in the existence of the ideas in boys over girls, girls over boys, as well as the differences or excesses in the three categories: Home, kindergarten, and crèches.¹

TABLE II.

No.	Concepts inquired after.	Number among each 10,000 children having the concept.	Excess of—				
			Boys over girls.	Girls over boys.	Home-trained children over kindergarten children.	Kindergarten children over home-trained children.	Home-trained children over crèche children.
1	Dwelling address.....	9,026	215	—	273	—	491
2	Occupation of father.....	8,945	—	672	226	—	1,303
3	Name of father.....	8,517	—	871	1,290	—	1,347
4	Starry sky.....	8,145	542	—	—	653	—
5	Thunderstorm at day.....	7,873	—	596	—	1,450	16
6	Rainbow.....	7,770	—	143	—	1,688	69
7	Sphere.....	7,623	136	—	—	940	93
8	Two.....	7,435	98	—	—	887	323
9	Three.....	7,399	180	—	—	63	74
10	Four.....	7,265	82	—	—	1,094	157
11	Hail.....	7,015	—	938	—	622	427
12	Cube.....	6,957	31	—	—	1,264	—
13	Potato field.....	6,323	—	132	—	20	359
14	Moon.....	6,215	—	425	—	1,913	94
15	Swan.....	6,175	1,385	—	—	1,056	77
16	Butterfly.....	6,028	2,522	—	—	2,755	652
17	Clouds.....	5,925	379	—	—	854	2,226
18	Fish.....	5,853	2,307	—	—	1,267	716
19	Unter den Linden.....	5,590	1,219	—	—	693	583
20	Thiergarten.....	5,496	1,071	—	—	1,255	548
21	Square.....	5,474	—	113	—	2,254	767
22	Evening red.....	5,384	419	—	—	732	451
23	Hasenheide.....	5,121	1,522	—	—	1,032	147
24	Frog.....	5,055	1,069	—	—	1,444	548
25	Circle.....	4,991	—	562	—	1,82	263
26	Snail.....	4,750	292	—	—	872	400
27	Sunset.....	4,625	688	—	223	—	513
28	Meadow.....	4,607	908	—	—	178	660
29	Alexanderplatz.....	4,366	—	645	580	—	570
30	Triangle.....	4,182	235	—	—	1,406	—
31	Field of grain.....	4,062	596	—	—	184	33
32	Zoological garden.....	4,057	661	—	—	2,596	191
33	Friedrichshain.....	3,887	—	658	1,205	—	776
34	Flock of sheep.....	3,870	310	—	—	584	288
35	Lustgarten.....	3,861	367	—	—	1,232	464
36	Forest.....	3,646	894	—	—	539	—
37	City hall.....	3,615	202	—	—	2,523	237
38	Morning red.....	3,592	—	218	—	583	145
39	Squirrel.....	3,579	705	—	—	1,733	35
40	Brandenburger Thor.....	3,467	917	—	—	1,286	1,495
41	Kreuzberg.....	3,454	1,661	—	—	586	—
42	Schloss (castle).....	3,423	98	—	—	859	338
43	Village.....	3,374	683	—	—	55	—
44	Thunderstorm at night.....	3,347	—	321	—	970	117
45	Mountain.....	3,248	352	—	—	1,578	31
46	Museum.....	3,222	523	—	47	—	256
47	Cuckoo.....	3,137	935	—	—	1,081	374
48	Treptow.....	3,065	299	—	—	938	898
49	Sunrise.....	3,052	820	—	484	—	70
50	Gensdarmmarkt.....	2,909	1,229	—	—	117	658
51	Stork.....	2,887	745	—	—	393	561
52	Palace of the king.....	2,886	672	—	—	825	74
53	Toadstool.....	2,855	799	—	—	880	214
54	Oak.....	2,641	—	36	325	—	71
55	Ploughing.....	2,636	1,483	—	—	720	582
							96

¹ These columns had been mixed through mistake by the printers of the original report, but are here presented in their correct order.—TRANSLATOR.

TABLE II—Continued.

No.	Concepts inquired after.	Number among each 10,000 children having the concept.	Excess of—					
			Boys over girls.	Girls over boys.	Home-trained children over kindergarten children.	Kindergarten children over home-trained children.	Home-trained children over crèche children.	Crèche children over home-trained children.
56	Sleet	2,493	810	-----	188	-----	-----	643
57	Moss	2,484	467	-----	-----	488	904	-----
58	Rabbit	2,466	36	-----	-----	624	256	-----
59	Stralau	2,453	885	-----	128	-----	275	-----
60	Harvesting	2,368	911	-----	-----	8	-----	272
61	Dew	2,364	-----	64	132	-----	423	-----
62	Wilhelmsplatz	2,158	1,232	-----	410	-----	821	-----
63	Lake	2,078	865	-----	55	-----	-----	116
64	Arsenal	1,957	476	-----	-----	983	-----	177
65	Pine	1,828	864	-----	-----	295	-----	193
66	Lark	1,796	971	-----	-----	519	-----	109
67	Reed	1,702	315	-----	-----	926	-----	915
68	Willow	1,667	1,123	-----	-----	39	203	-----
69	Huckleberry bush	1,640	349	-----	-----	1,081	-----	6
70	Birch	1,318	487	-----	-----	16	110	-----
71	Rummelsburg	1,242	496	-----	345	-----	-----	91
72	Invalidenpark	1,135	379	-----	-----	391	-----	745
73	River	1,122	11	-----	226	-----	293	-----
74	Hazel bush	907	348	-----	-----	105	165	-----
75	Botanical garden	527	-----	172	-----	664	81	-----

From the foregoing table (II) we see that by far the greater number of ideas, nearly 75 per cent, were found more frequently in boys than in girls. Greater even than that is the difference between children coming directly from home and those coming from the kindergarten. The latter have a much greater wealth of ideas than the former. The difference is less marked between children coming directly from home and those having been kept in crèches (Bewahranstalten). It is plain, therefore, that the school must assume an attitude with reference to boys different from that assumed toward girls; likewise different attitudes as regards home children, kindergarten children, and children from crèches. Many of the ideas in question may have been familiar to children who professed not to have them, they never having connected such ideas with the names by which they are expressed; or, perchance, there may have been neglect to call the children's attention to them.

One specially noteworthy peculiarity is revealed by comparing the differences between boys and girls. We notice that the girls more often surpass the boys in acquiring ideas in the case of those ideas that are most common on the whole or most frequently met with among children. Now, it is to be presumed that common ideas, those frequently found in the consciousness of children, are acquired with more facility than those found rarely among children. Hence it may be concluded that the mental range (or compass) of girls, as compared with that of boys, is more enlarged in the case of those ideas that find an easy lodgment in the minds of children generally, than it is in the case of those that are more difficult of conception. The matter can be made plainer by indulging in the fiction that each idea grows gradually, but to a greater extent the less opposition it finds, only that the opposition is also fictitious. Assuming this, we may say: The easier an idea finds entrance into the consciousness of children, the easier will it do so in girls, and contrariwise, the more difficult will it be to enter the boys' consciousness. If we divide the column of numbers of Table II into groups of ten ideas (omitting the last five) we find the following result:

Ten ideas found in—	Of these ten ideas there were prevalent—	
	Among boys.	Among girls.
From 1,318 to 2,364 children.....	9	1
From 2,368 to 2,887 children.....	9	1
From 2,909 to 3,454 children.....	9	1
From 3,467 to 4,062 children.....	8	2
From 4,182 to 5,474 children.....	7	3
From 5,496 to 7,015 children.....	7	3
From 7,265 to 9,026 children.....	6	4

The concepts which we find in girls more frequently than in boys are: Name and occupation of father, thunderstorm, rainbow, hail, potato field, moon, square, circle, Alexanderplatz, Friedrichshain, morning red, oak, dew, and botanical garden.

We leave it to psychologists to study particular phases of the results, some of which seem eminently important to psychology, as for instance: Though the sphere is the carrier of an infinite number of circles, and though every cube is bounded by six squares, and the idea triangle seems to be more easily conceivable than the square, we find nevertheless that the sphere is known by 76.23 per cent of the children, the cube by 69.57 per cent, the square by 54.74 per cent, the circle by 49.91 per cent, the triangle by 41.83 per cent.

It may be of general interest, however, to view the various groups of ideas. The totals found allow us to frame the following table (III):

TABLE III.

Ideas.	Of every 10,000 the ideas were in the consciousness of—					
	Boys.	Girls.	Children coming from home.	Children coming from kindergarten.	Children coming from crèches.	Children in the aggregate.
Arithmetical.....	7,412	7,308	7,359	7,978	7,175	7,367
Geometrical.....	5,821	5,879	5,701	7,239	5,903	5,846
Astronomical.....	5,690	5,276	5,503	5,963	5,370	5,509
Thunderstorm.....	5,400	5,880	5,550	6,710	5,635	5,610
Precipitation.....	4,471	4,422	4,405	4,694	4,532	4,449
Atmospheric phenomena.....	5,591	5,571	5,505	6,516	5,543	5,582
Mammals.....	3,180	2,820	2,821	4,000	3,441	3,023
Birds.....	3,933	2,938	3,415	4,177	3,574	3,499
Cold-blooded vertebrates.....	6,201	4,523	5,285	6,645	5,751	5,469
Mollusks.....	6,003	4,596	5,057	6,871	6,120	5,389
Phanerogamous plants.....	1,886	1,393	1,676	1,982	1,541	1,671
Cryptogamous plants.....	2,946	2,313	2,703	3,387	2,286	2,779
Geographical.....	3,204	2,597	2,887	3,290	3,012	2,940
Locations.....	4,038	3,321	3,733	4,139	3,545	3,725
Buildings.....	3,193	2,798	2,874	4,090	3,196	3,021
Landscapes.....	3,662	3,022	3,281	4,046	3,533	3,382
Suburbs.....	2,498	1,938	2,297	2,452	2,017	2,253
Agricultural.....	4,048	3,415	3,717	3,978	3,907	3,772
Concerning home and family.....	8,639	9,097	9,042	8,796	8,029	8,829

From this we derive the following table for purposes of comparison:

TABLE IV.

Ideas.	Number of children having the idea in every 10,000.	Excess.				
		Among boys.	Among girls.	Among kindergarten children.	Among children from home.	Among children from crèches.
Concerning family and home	8,829	-----	458	246	1,013	-----
Arithmetical	7,367	104	-----	619	184	-----
Geometrical	5,846	-----	58	1,538	-----	202
Thunderstorm	5,610	-----	480	1,160	-----	85
Atmospherical phenomena	5,582	20	-----	1,011	-----	38
Astronomical	5,509	414	-----	465	133	-----
Cold-blooded vertebrates	5,469	1,678	-----	1,360	-----	466
Mollusks	5,389	1,407	-----	1,814	-----	1,083
Precipitations	4,449	49	-----	289	-----	127
Agricultural	3,772	633	-----	261	-----	190
Locations	3,725	719	-----	406	188	-----
Birds	3,499	995	-----	762	-----	159
Landscapes	3,382	640	-----	765	-----	252
Mammals	3,023	360	-----	1,179	-----	620
Buildings	3,021	395	-----	1,216	-----	322
Geographical	2,940	607	-----	403	-----	125
Cryptogamous plants	2,670	633	-----	684	417	-----
Suburbs	2,253	560	-----	155	280	-----
Phanerogamous plants	1,671	493	-----	306	135	-----

The relations of children to their homes and families are so intimate and so frequently renewed after brief intervals spent in school or on the street that one can not but expect them to know family and home. But in this the more introspective life of the girls is revealed, in contrast to the life of boys, which is directed, even in early childhood, toward the outside world. This tendency of boys to look at things outside is so noticeable that the girls come to school richer than the boys in only three groups of ideas, to wit: In ideas of home and family, and in geometrical and in meteorological ideas. The fact that with girls the ideas of space, with boys the ideas of number, should predominate is certainly worthy of notice. That the concepts of thunderstorm and its attendant phenomena should be more lasting in girls than in boys shows that the girls have a greater disposition to fear and apprehension. A boy is not generally moved by thunder, lightning, and pouring rain any more than by other phenomena; they appear to him not more important than others. The same disposition in girls to apprehension may also give rise to their observing hail and dew on the grass, things less often observed by boys.

The greater wealth of ideas among children coming from crèches (Bewahranstalten), and the still greater wealth among children coming from the kindergarten, as compared with those who have attended neither of these institutions, is so striking that the decision as to whether the kindergarten for the preschool age is desirable or not can not remain doubtful for a single moment. The following somewhat condensed tables (V and VI) show this very plainly, especially the latter, which exhibits the differences:

TABLE V.

Ideas.	Of every 10,000 the ideas were in the consciousness of—					
	Boys.	Girls.	Children coming from home.	Children coming from kindergarten.	Children coming from crèches.	Children in the aggregate.
Arithmetical.....	7,412	7,308	7,359	7,978	7,175	7,367
Geometrical.....	5,821	5,879	5,701	7,239	5,903	5,846
Astronomical.....	5,690	5,276	5,505	5,968	5,370	5,508
Meteorological.....	5,051	5,129	5,015	5,749	5,114	5,085
Animals.....	4,650	3,563	3,999	5,174	4,492	4,175
Plants.....	2,122	1,598	1,904	2,294	1,706	1,893
Geographical.....	3,204	2,597	2,887	3,290	3,012	2,940
Locations.....	4,038	3,321	3,735	4,139	3,545	3,725
Buildings.....	3,193	2,798	2,874	4,090	3,196	3,021
Landscapes.....	3,662	5,022	3,281	4,046	3,533	3,382
Suburbs.....	2,498	1,938	2,297	2,452	2,017	2,253
Agricultural.....	4,048	3,415	3,717	3,978	3,907	3,772
Family and home.....	8,639	9,097	9,042	8,796	8,029	8,829

TABLE VI.

Ideas.	Of 10,000 children the idea was possessed by—	Excess of—					
		Boys over girls.	Girls over boys.	Coming from home over kindergarten.	Coming from kindergarten over home.	Coming from home over crèches.	Coming from crèches over home.
Family and home.....	8,829	-----	458	246	-----	1,013	-----
Arithmetical.....	7,367	104	-----	-----	619	184	-----
Geometrical.....	5,846	-----	58	-----	1,538	-----	202
Astronomical.....	5,509	414	-----	-----	465	133	-----
Meteorological.....	5,085	-----	78	-----	734	-----	99
Animals.....	4,175	1,087	-----	-----	1,175	-----	493
Agricultural.....	3,772	633	-----	-----	261	-----	190
Locations.....	3,725	717	-----	-----	406	188	-----
Landscapes.....	3,382	640	-----	-----	765	-----	252
Buildings.....	3,021	395	-----	-----	1,216	-----	322
Geographical.....	2,940	607	-----	-----	403	-----	125
Suburbs.....	2,253	560	-----	-----	155	280	-----
Plants.....	1,893	524	-----	-----	390	198	-----

The lessons to be derived from this table are so obvious that it is not necessary to dwell on them. We therefore proceed to the next summary:

TABLE VII.

Ideas.	Of every 10,000 the ideas were in the consciousness of—					
	Boys.	Girls.	Children coming from home.	Children coming from kindergarten.	Children coming from crèches.	Children in the aggregate.
Mathematical.....	6,418	6,415	6,323	7,516	6,380	6,416
Physical.....	5,247	5,174	5,135	5,816	5,193	5,216
Natural history.....	3,453	2,632	3,007	3,810	3,172	3,091
Geographical.....	3,204	2,597	2,887	3,290	3,012	2,940
Topographical.....	3,491	2,900	2,173	3,856	3,240	3,233
Agricultural.....	4,048	3,415	3,717	3,978	3,907	3,772
Home and family.....	8,639	9,097	9,042	8,796	8,029	8,829

TABLE VIII.

Ideas.	Of 10,000 children the idea was possessed by—	Excess of—					
		Boys over girls.	Girls over boys.	Coming from home over kindergarten.	Coming from kindergarten over home.	Coming from home over crèches.	Coming from crèches over home.
Home and family	8,829	-----	458	246	-----	1,013	-----
Mathematical	6,416	8	-----	-----	2,193	-----	57
Physical	5,216	73	-----	-----	681	-----	58
Agricultural	3,772	633	-----	-----	261	-----	190
Topographical	3,233	591	-----	-----	1,683	-----	1,067
Natural history	3,091	821	-----	-----	803	-----	165
Geographical	2,940	607	-----	-----	403	-----	125

From the foregoing tables it is seen that the children are the more ignorant of things the farther away the things are from home, a fact which might have been foreseen. Number of house, street of parents' dwelling, and occupation of the father, likewise simple mathematical concepts, can be acquired by a child without crossing the threshold of his home, and without being taken out into the open air into parks or into the country. In all classes of ideas, with exception of the one concerning home and family, the girls' knowledge is less than that of the boys. Those who have attended kindergartens know more than those having attended crèches, and both know more than those exclusively kept at home.

Summarizing the various groups of ideas still more, we find these facts clearly demonstrated:

TABLE IX.—Average number of children conscious of the ideas in every 10,000.

Ideas.	Boys.	Girls.	Coming from home.	Coming from kindergarten.	Coming from crèches.	Children in the aggregate.
Natural	4,470	4,035	4,206	4,991	4,308	4,280
Human	4,117	3,621	3,868	4,374	3,852	3,906
Both classes combined.....	4,329	3,869	4,071	4,744	4,126	4,128

The general conclusion, then, is that occasional instruction in families, in replies to questions such as: What is this? What is it called? is much neglected. The child comes to school comparatively poor in concepts, and school is forced either to operate with mere words or to substitute in place of observation of living or actual objects lifeless representations on charts, or, thirdly, go back to actual observation of natural objects. Only the last is sensible. School finds its work somewhat prepared by the crèches (Bewahranstalten) and the kindergartens. The latter are by far preferable. School also finds the boys better prepared than the girls.

F. CRITICISM OF THE APPLIANCES FOR TEACHING.

The importance of the existence or nonexistence of the concepts in question becomes obvious when we select from the list those which must be presupposed in order that the teacher may use the appliances for teaching, such as text-books and charts prescribed for the schools. These selected ideas are: Sunrise, sunset, starry sky, clouds, rainbow, evening red, morning red, cuckoo (its nest), lark (its song), reeds (on the banks of the water), mountain, forest, river, flock of sheep, grain field, village, plowing, harvesting. It is easily seen how little the appliances and text-books used in school are adapted to the horizon of ideas of the pupils.

Taking the total number of children again as a basis of calculation, we find the following results:

TABLE X.

Ideas.	Number of children in every 10,000 acquainted with the ideas—	
	In general.	That are presupposed.
Astronomical	5,509	5,274
Precipitations	4,449	5,925
Atmospheric phenomena	5,582	5,582
Animals	4,175	2,466
Plants	1,898	1,256
Geographical	2,940	2,672
Agricultural	3,772	3,262
Physical	5,216	5,499
Natural historical	3,091	2,212
Geographical	2,940	2,672
Agricultural	3,772	3,262
Natural	4,280	4,088
Human	3,900	3,772
Total	4,128	3,859

It is plain that the customary books and appliances which are to be considered here presuppose certain fundamental ideas with which the Berlin children are not familiar. From this results: (1) The impossibility of selecting from among the well-known text-books and appliances those which could be made comprehensible to the children of Berlin; (2) the very great difficulty of finding any books and appliances which are adapted to the ideas which may be presupposed in a given community; (3) the suggestion not to begin with the printed page at all (books or charts), but base all primary instruction on actual observation and the analysis of the thought material the child brings with it; (4) the necessity of supplying the missing ideas by the study of objects. Suffice it, the results open a wide perspective.

G. HISTORICAL IDEAS.

We now turn to the supply of historical ideas the children bring with them to school. They belong partly to the realm of religion, partly to that of fairyland. The question as to how many of the children had attended religious service in church is of no importance for our purposes, and the other question as to how many of the children had heard anything of fairy stories is so difficult to answer that it, too, loses importance. The results derived from the return, however, are briefly given in Table XI.

This table contains one fact remarkable to a high degree, to wit, that boys are more familiar with religious ideas than girls; that, on the other hand, the girls are better acquainted with fairyland in almost the same proportion. * * *

TABLE XI.

Ideas.	Of every 10,000 the ideas were familiar to—					
	Boys.	Girls.	Children coming from home.	Children from kindergartens.	Children from crèches.	Children in the aggregate.
God	7,827	5,067	6,927	5,935	5,704	6,622
Christ	6,757	4,217	5,818	5,355	5,104	5,648
Biblical stories	3,743	1,453	2,727	2,258	2,979	2,744
Prayers and hymns	5,400	4,647	5,078	5,613	4,850	5,041
Snowwhite	2,173	3,009	2,436	4,387	2,263	2,538
Red Riding Hood	2,427	3,664	2,800	4,581	3,025	2,967
Sleeping Beauty	563	1,044	661	1,871	808	773
Cinderella	1,784	2,897	2,182	3,871	2,032	2,270
Religious ideas	5,852	3,846	5,138	4,790	4,639	5,021
Ideas of fairy stories	1,734	2,654	2,020	3,677	2,032	2,137

However venturesome it may appear to draw conclusions from this upon the differences in soul life of boys and girls, yet it may be assumed that the inner natures of the two sexes are in decided contrast to each other. Since it is reasonable to suppose that both boys and girls have in general the same opportunities to acquire ideas of religion and of fairyland, the want of comprehension for or the facility for forgetting these ideas must be dependent upon an original difference in intellectual disposition.

Also the differences between children of the three classes—those coming from home, from the kindergarten, and from crèches—are remarkable. Children coming directly from home hear more of God and get more religious ideas than children having attended kindergartens or crèches. The predominance of biblical stories and of prayers and hymns found among children coming to school from crèches and kindergartens, respectively, would indicate that in the crèches biblical stories are taught and in the kindergartens prayers and hymns are memorized. Both practices may be regarded as serious pedagogical errors.

As regards the fairy stories, it is found that they are best known by children coming from kindergartens. If this indicates that fairy stories are made a subject for instruction in kindergartens, it would prove a pedagogical error, for, in our opinion, the kindergarten age is too early an age for fairy stories. But if such stories are introduced there, no others than the four mentioned in the foregoing list should be used.

The relative prevalence among children, expressed in percentages, of the four religious points of knowledge and of the four fairy stories under consideration is as follows:

Religious ideas.	Per cent of prevalence.	Fairy stories.	Per cent of prevalence.
God.....	33	Red Riding Hood.....	34.7
Christ.....	28.2	Snowwhite.....	29.7
Prayers and hymns.....	25.1	Cinderella.....	26.6
Biblical stories.....	13.7	Sleeping Beauty.....	9

It is especially noticeable that the most charming of all natural fairy stories, namely, Sleeping Beauty (the reawakening of spring), is so little known, particularly since it is the simplest of all. Has the comprehension for the intimate connection of popular poetry with natural phenomena been lost among the people?

H. ACCOMPLISHMENTS ACQUIRED AT HOME.

Lastly, we may see the result of the inquiry regarding certain accomplishments with which the child is equipped when it comes to school. Those about which the returns give information are: Correct repetition of phrases pronounced by the teacher, recital of verses, singing of a song, and sounding of a note after the teacher. The absolute numbers are found in the following summary:

TABLE XII.—*Number of children that have certain accomplishments.*

Accomplishments.	Boys.	Girls.	Children coming from home.	Children coming from kindergarten.	Children coming from crèches.	Children in the aggregate.
Repetition of phrases.....	1,093	620	1,295	104	314	1,713
Recital of verses.....	791	523	1,016	63	235	1,314
Singing of songs.....	694	440	861	61	212	1,134
Sounding a note.....	535	401	691	47	198	936

TABLE XII.—*Number of children that have certain accomplishments*—Continued.

ALL REDUCED TO A BASIS OF 10,000.

Accomplishments.	Boys.	Girls.	Children coming from home.	Children coming from kindergarten.	Children coming from crèches.	Children in the aggregate.
Repetition of phrases.....	8,868	6,364	7,848	6,710	7,252	7,654
Recital of verses.....	6,273	5,353	6,158	4,065	5,427	5,871
Singing of songs.....	5,504	4,504	5,218	3,936	4,896	5,067
Sounding a note.....	4,243	4,104	4,188	3,082	4,573	4,182

This table also offers a striking and unexpected result. Everyone of the accomplishments is found more frequently among boys than among girls; likewise more frequently among children coming directly from the family than among those having attended kindergartens, and with exception of singing of songs than among those from crèches, and among the latter more frequently in every case than among the kindergarten children.

The relative abilities, reduced to a scale of 100, of the three classes of children in each of the four accomplishments are shown in the following table:

TABLE XIII.

Children coming from—	Ability to—			
	Repeat phrases.	Recite verses.	Sing songs.	Repeat a note.
The family.....	36	37.1	35.5	39.3
Crèches.....	33.2	34.9	38.8	34.7
Kindergartens.....	30.8	23	25.7	26

If we consider that the children attending kindergartens are of well-to-do parents, while those attending crèches belong to poor families, the first and second columns of the foregoing table would show that poor parents occupy their time more with their children, and the very poorest probably do so less only because they lack the time. As to singing, the difference can only be explained by assuming that the children of well-to-do parents, despite their attending the kindergarten, are less allowed to sing at home than those of poor parents. Hence it seems allowed to deduce the rule: The better the parents are situated the more quiet must the child remain at home and the less is it allowed to follow its instinct of imitation. That the ability to sing is in most cases inborn is obvious from the large number of children coming from home who can repeat what is sung to them. On an average the accomplishments of children (in the four points mentioned) reared solely in the bosom of the family appear to be greater than those who have had some training in the kindergartens, as has already been remarked. However, it would seem hazardous to draw definite conclusions from this, inasmuch as the number of children coming from kindergartens as compared with the sum total examined is too small for a just comparison.

It was intended to summarize the returns with reference to the various wards of the city, so as to compare certain classes of society with others, but the material on hand is much too limited for the purpose. Hence we conclude the investigation here.

I. SUGGESTIONS FOR FURTHER RESEARCH

The first thought of establishing a system of statistics for psychological questions is to be attributed to Sigismund, who as early as 1856 expressed it in his

book, *Kind und Natur* (Braunschweig). The first attempt at realizing this thought, namely, to exhibit in statistical form the intellectual life of children, was made in the teachers' seminary at the University of Jena. The main purpose of this investigation was to show the character and intensity of the various kinds of interest in children, to wit, empiric and speculative, ethical and esthetic, religious and sympathetic interest, as well as the manner of reproduction of the matter learned with reference to exactness or confusion, completeness or omission, rhythm and degree of speed. However, a publication of the results did not follow. Hence it may be said that this attempt in Berlin is the first which appears before the public eye with tabulated results.

The presupposition upon which the work rests is quite correct, for instruction and training can be successful only if they cohere with what is present in the child's mind. Equally true is the assertion that the teacher's method, selection and use of the appliances for teaching (text-books, charts, etc.), essentially depend upon the number of ideas with which the children are supplied. According to what principles the Pedagogical Society selected the questions (enumerated in the foregoing text) is not stated, nor can it be derived from the questions themselves. It would seem to the writer as though it would be best to restrict the inquiry to the purely psychological field, for not only is psychology the most important of the allied sciences of pedagogy, and statistical investigations like the present will give valuable contributions to it, but such restricted attempts will also result in obtaining uniform material, since the inquiries will be conducted under relatively like conditions. A simple example will show this: It is a purely psychological question to ask what children had seen the Alexanderplatz, for the answer to that is dependent not only upon the children's intellectual development and the instructive activity of the parents, but also upon the location of the children's homes. On the other hand, numbers, forms, and relations of solids, colors, tones, etc., domestic, atmospheric, astronomical, etc., facts, call for a certain skill or dexterity of hand or brain, exclusively developed at home and not subject to the influence of the outer world. This is what is meant by restricting any such inquiry to a purely psychological basis.

Furthermore, it may be advised to restrict the number of queries to such as will permit of exact replies. For this purpose small groups of concepts (as numerical, geometrical, meteorological, geographical, etc.), will serve best, and they should be asked year after year. Also concepts may be chosen at times which may be especially difficult or very easy to acquire for a child in the city of Berlin.

If according to the nature of the group of questions 6 to 12 questions be proposed, they could all be answered orally and the replies recorded in a single hour. For if, for instance, about 50 children enter a school as new pupils, that school must have about 10 teachers. Distributing for examination these 50 children among all the teachers of the school would give 5 children to each teacher. In one hour they could satisfactorily establish the fact whether the children could count 2, 3, 4, etc., or whether they could distinguish such terms as right and left, forward and backward, up and down, perpendicular and horizontal or slanting, straight and crooked, angular and round, etc. This mode of procedure would not only yield results serviceable for the instruction in class, but would also furnish a sound basis for secure, scientific deductions.

With regard to physiologic-psychological questions, we refer to Sigismund's book, *Kind und Natur*, referred to above. The author advises to investigate the old assertion of nurses that fleshy and physically strong children take longer to develop mentally than lean and physically weak children; whether girls develop faster than boys; what influence nourishment or the seasons of the year have upon their mental development; to what degree school education actually promotes mental development, and how the power of using language is developed.

The field of investigation is endless, in view of the inexhaustible wealth of the human mind.

With the hope that the teachers of Berlin who have made such a promising beginning in the matter, will continue their investigations, the valuable report closes.

J. SUPPLEMENT.

The third attempt to investigate the minds of children newly entering school was made in 1879 by Dr. K. Lange, school principal in Plauen, Saxony, author of the well-known monograph, *Ueber Apperception*. He proposed the following fourteen questions:

1. Who has seen the sun rise and set?
2. Who has seen the moon and the stars?
3. Who has seen a lark and heard it sing?
4. Who has seen a fish swimming in water?
5. Who has been in a boat on the pond?
6. Who has been on the banks of a brook or river?
7. Who has been on a mountain?
8. Who has been in the woods?
9. Who knows an oak?
10. A grain field?
11. Who knows what is to be done to make bread of grain?
12. Who has seen a shoemaker, a joiner, a mason at work?
13. Who has been in a church?
14. Who knows anything of God?

The questions were submitted to 500 elementary pupils of the town of Plauen and to over 300 children in rural schools in the neighborhood. Though the tabulated summaries of these inquiries are not available to the present writer, it is known that the published statements of Dr. Lange contained the following interesting results: The ideas of natural objects were woefully lacking in the town children. Not one-fourth of the 500 children examined had seen the sun set; only one-half of their number had been at a pond or had climbed a hill or mountain. It is especially interesting to note what the author says concerning the difference between boys and girls. "According to the tabulated results, the girls have, at their entrance into school, throughout fewer ideas of the environment of their home than the boys. They have, it appears, seen less, heard less, observed less than the boys. This is true for both town children and those in rural districts. Only in one point did the girls of the Plauen school excel the boys: They knew more than the boys of God."

The fourth attempt "en masse" to examine the contents of children's minds at their entrance into school was made in Annaberg, Saxony, Germany, in 1884. It was much more searching than the attempt at Plauen, and was organized on the Berlin plan. Many of the Berlin questions were used. The tabulated results are given below. What makes these results so valuable is the fact that they

have been repeated through five consecutive years (1880-1884)—that is to say, the sum total of 1,312 children includes the new pupils of five years. Other inquiries have since been made in Saxony and other States of Germany.

The introduction of Dr. Berthold Hartmann, who published the results of the Annaberg investigation, may be here omitted, but his tables are full of unexpected results.

TABLE XIV.—*Results of the inquiry at Annaberg, Saxony.*

No.	Ideas or objects inquired after.	The idea or object was known by—			Statement in per cents.		
		Of 660 boys.	Of 652 girls.	Of 1,312 children.	Boys.	Girls.	Average.
1	Rabbit	126	81	207	19	12	16
2	Squirrel	99	69	168	15	10	13
3	Flock of sheep	235	198	433	36	30	33
4	Starling	85	68	153	13	10	12
5	Goose	272	250	522	41	38	40
6	Hen	195	178	373	30	27	28
7	Cuckoo	69	88	157	10	13	12
8	Lark	76	83	159	12	13	12
9	Frog	188	126	314	29	19	24
10	Fish	141	122	263	21	19	20
11	Bee	75	46	121	11	7	9
12	Butterfly	287	362	649	44	55	49
13	Snail	210	201	411	32	31	31
14	Birch tree	33	10	43	5	2	3
15	Pine tree	145	148	293	22	23	22
16	Maple tree	17	11	28	3	2	2
17	Cherry tree	83	138	221	13	21	17
18	Apple tree	208	219	427	31	34	33
19	Hazel bush	78	42	120	12	6	9
20	Wild flowers	322	317	639	49	49	49
21	Huckleberries	158	193	351	24	29	27
22	Moss	130	107	237	20	16	18
23	Toadstool	113	165	278	17	25	21
24	Sandpit	58	37	95	9	6	7
25	Stone quarry	121	105	226	18	16	17
26	Mine (coal)	41	33	74	6	5	6
27	Thunderstorm	363	424	787	55	65	59
28	Fog	186	246	432	28	38	33
29	Clouds	266	293	559	40	45	42
30	Sleet	307	315	622	46	48	47
31	Rainbow	226	264	490	34	40	37
32	Evening red	119	166	285	18	25	22
33	Sunset	82	77	159	12	12	12
34	Phases of the moon	148	223	371	22	34	28
35	Starry sky	349	466	815	53	71	62
36	Clock dial	27	18	45	4	3	3
37	Days of the week	54	92	146	8	14	11
38	Seasons of the year	37	64	101	6	10	8
39	Cardinal points	4	1	5	1	0	1
40	Home address	543	503	1,046	82	77	80
41	Zürcher Platz	346	328	674	52	50	51
42	Hauptmarkt	471	452	923	71	69	70
43	Buchholzer street	278	281	559	42	43	43
44	High school	133	164	297	20	25	23
45	Bergchurch	210	220	430	32	34	33
46	Catholic Church	231	237	468	35	36	36
47	City hall	430	403	833	65	62	63
48	Post-office	297	344	641	45	53	49
49	Railroad depot	418	433	851	63	66	65
50	Bahl's restaurant	167	189	356	25	29	27
51	Botanical garden	163	180	343	25	27	26
52	Markus-Röhling	193	267	460	29	41	35
53	Promenade	228	292	520	35	45	40
54	Grove	172	253	425	26	39	32
55	Cemetery	394	469	863	60	72	66
56	Pöhlberg	217	244	461	33	37	35
57	Galgenberg	89	89	178	13	13	13
58	Schreckenbergl	117	112	229	18	17	17
59	Buchholz	282	329	611	43	50	47
60	Frohnau	164	226	390	25	35	30
61	Wiesbaden	121	159	280	18	24	21
62	Geyersdorf	139	200	339	21	31	26
63	Valley	51	59	110	8	9	8
64	River	150	157	307	23	24	23
65	Bridge	282	258	540	43	39	41

¹ Reading the hours.

TABLE XIV.—*Results of the inquiry at Annaberg, Saxony—Continued.*

No.	Ideas or objects inquired after.	The idea or object was known by—			Statement in per cents.		
		Of 660 boys.	Of 652 girls.	Of 1,312 children.	Boys.	Girls.	Average.
66	Water mill	152	151	303	23	23	23
67	Pond	434	490	924	66	75	70
68	Meadow	250	218	468	38	33	36
69	Grain field	183	111	294	28	17	22
70	Potato field	345	358	703	52	55	54
71	Snow landscape	289	262	551	44	40	42
72	Village	158	175	333	24	27	25
73	Soldiers' monument	180	136	316	27	21	24
74	Fountain	397	394	791	60	60	60
75	Ride in carriage	332	362	694	50	55	53
76	Ride on railroad	300	346	646	45	53	49
77	Work in the field	250	181	431	38	28	33
78	Work in the garden	213	211	424	32	32	32
79	Triangle	62	66	128	9	10	10
80	Square	101	90	191	15	14	15
81	Cube	214	293	507	32	45	39
82	Circle	280	284	564	42	43	43
83	Sphere	546	510	1,056	83	78	80
84	Counting to 10	456	405	861	69	62	66
85	God	370	401	771	56	61	59
86	Christ	68	142	210	10	22	16
87	Biblical stories	7	14	21	1	2	2
88	Prayers and hymns	122	184	306	18	28	23
89	Church service	192	223	415	29	34	32
90	Baptism	118	228	346	18	35	26
91	Wedding	70	227	297	11	35	23
92	Name and occupation of father	425	370	795	64	57	61
93	King	52	42	94	8	6	7
94	Coins	450	398	848	68	61	65
95	Disease	356	406	762	54	62	58
96	Fairy stories	32	39	71	5	6	5
97	Repeating words	480	426	906	73	65	69
98	Reciting verses	68	62	130	10	9	10
99	Repeating tones	226	245	469	34	37	36
100	Singing songs	102	161	263	15	25	20



CHAPTER XVI.

THE EDUCATION OF THE NEGRO.

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TOPICAL OUTLINE.

PART I.—THE ECONOMIC BASIS OF NEGRO EDUCATION.

I. THE EDUCATIONAL SIGNIFICANCE OF THE GROWTH AND TENDENCY OF THE NEGRO POPULATION.

The growth and spread of the negro population in the United States. The bulk remains in the South. Localization of national problem calls for national aid. Slight tendency toward North and West. Mixed schools in North and West. Dwindling of race in border States. Social isolation the cause. Difficulty of maintaining adequate separate school system for sparse negro element in border States. Decline of negro population in Kentucky. Black belts of the South. Area in which negroes are more than twice as numerous as whites. Area and relative density of region in which negroes are in the majority. Causes tending to perpetuate black belts. The social and educational problems of black belts.

II. EARLY STRUGGLE FOR EDUCATION, PERSONAL RISK, AND ECONOMIC SACRIFICE.

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PART I.—THE ECONOMIC BASIS OF NEGRO EDUCATION.

I. THE EDUCATIONAL SIGNIFICANCE OF THE GROWTH AND TENDENCY OF THE NEGRO POPULATION IN THE UNITED STATES.

Population lies at the basis of all human problems. All progress, development, and civilization are merely emergencies from man in the mass. A persistent group of people, however lowly its present state may be, contains all the potential possibilities of the human race. The development and expansion of population, therefore, afford the surest measure of advancement.

The one striking feature about the American negro is his physical persistence and expansion. The half million Africans who were imported into this country from their native land have so multiplied and ramified as to complicate every factor in the equation of American life. The negro element in the United States to-day exceeds the entire population of ninety years ago. The negro is found in every State and Territory, in almost every town and hamlet, ranging in relative density from fifteen to one in the black counties of the South to less than one in a hundred in the higher latitudes. This widespread distribution among the white population gives an African flavor to local and national problems. No question can be considered on its merits apart from its bearing upon the black man and brother. Religious, political, industrial, and educational problems all take on racial color and tinge.

Of all uplifting agencies one would say that education is the common lever, and applies alike to all without regard to ethnic considerations. And yet the education of the negro constitutes as urgent a special problem as any that confronts the American people for solution. A study, then, of the distribution of the negro element among the general mass of the population is essential to a clear understanding of the educational needs of the situation. It is only by this knowledge that we can locate the area where the need is greatest and where the call for agencies of enlightenment is loudest. A localized knowledge of the negro peoples will also enable the educator to adapt plans and methods to the requirements of a variant situation. No greater mistake can possibly be made than to suppose that the entire negro race requires one fixed and inflexible programme of treatment, with no variation to meet local and special conditions. A race of 9,000,000 souls, scattered over so wide a geographical area and endowed with divergent aptitudes and capacities, encompasses the entire circle of human needs.

There are four phases of the negro population which entail important educational consequences.

(1) The movement toward the Northern and Western States, where there are no separate schools, places a portion of the race on the same educational footing with children of European descent. A broad distinction, therefore, must be made between the States which divide the schools on racial lines and those which do not. Owing to the relative density of the negro population in the two sections, the scholastic separation of the races follows quite closely the line of cleavage between the slave and free States. The half million negroes in the Northern States constitute no special educational problem.

(2) The tendency of population to drift into cities presents important educational suggestions. This tendency is no doubt due, in part, to the better school facilities which the cities afford. The million negroes in the large centers have fairly adequate and ample educational facilities. The South is too poor to provide adequate schools for the population sparsely scattered over the rural area, and especially so under the policy of separate instruction for the two races. But in the cities, where the population is dense and where the wealth is amassed, the conditions are much more favorable. Nor does the duplication of schools work such an economic hardship; for where there are sufficient numbers of both races to maintain the schools with a full complement of pupils there is little waste in the dual system. The education of the city negro will be treated in a separate chapter.

(3) The thinning out of the African element in the border States, where separate schools exist for the two races, must eventually raise the question of the feasibility of maintaining an independent system of schools for so sparse a population. In the State of Missouri 150,000 negroes scattered throughout the State would demand in equity almost as many schools as 16 times as many whites, and on a corresponding scale of cost. Oftentimes there are not enough negroes in a whole county to supply children for a single school, and yet these few children may be scattered over four or five hundred square miles. This is merely suggestive of the special educational problem of the border States.

(4) The segregative tendency of the negro population to lodge itself in certain sections of the Southern States localizes what might otherwise be a national problem. If this black mass were equably diffused throughout the country, the problem, in its educational aspect at least, would lose in intensity what was gained in extension. But the stubborn tendency of this mass to settle into knots and ganglia where the institution of slavery planted it most thickly emphasizes the pressing need of special remedial agencies. The condition of the negro in these congested localities and the utter inadequacy of local provision call more loudly than anything else for national aid to popular education.

A detailed study of the negro population will bring these problems more clearly to light:

Negro population of the United States.

Year.	Colored population.	Decennial increase.	Increase, per cent.	Per cent of total population.
1790	752,208	-----	-----	19.27
1800	1,002,037	244,829	32.33	18.88
1810	1,377,808	375,771	37.50	19.03
1820	1,771,656	393,848	28.50	18.39
1830	2,328,642	556,986	31.44	18.10
1840	2,873,648	545,006	23.44	16.84
1850	3,638,808	765,169	26.63	15.69
1860	4,441,830	803,022	22.07	14.13
1870 ¹	5,391,000	949,170	21.37	13.84
1880	6,580,793	1,189,793	22.07	13.12
1890	7,470,040	889,247	13.51	11.93
1900	8,840,789	1,570,749	18.35	11.57

¹ Estimated by Gen. Francis A. Walker.

If we begin with 1810, the first census year after the constitutional abolition of the slave trade, we see that the growth of the negro element followed the ordinary laws of population, viz, a gradual decline in the rate of increase. In 1810 there were 1,377,808 negroes in the United States. In eighty years this number had swollen to 7,470,040. It more than quintupled itself in eight decades. The relative decline of the African element as a factor of the general population is due to the influx of foreign white immigration. Seven hundred thousand negro females in eighty years produced a progeny of 7,000,000. The African is without question the most prolific element in America. The race will not only persist as a physical factor of the American people, but its natural increase will be sufficient to perpetuate the race problem in unabated force. This fact suggests the wisdom of immediate action, in so far as the problem will yield to ascertained methods of treatment. To delay is not only dangerous, but is expensive as well. While it is conceded on all hands that the negro has made wonderful strides in education, yet there are probably more illiterate negroes in the United States to-day than there were in 1860. The additive difficulties keep fully abreast of the agencies of relief. If national aid to education had been extended ten years ago there is no doubt that some of the phases of the race problem would have been much nearer solution than they are to-day. Procrastination to-day will only add new complications for to-morrow.¹

Negro population of the United States, by slave and free States.

State.	1890.	1880.	1870.	1860.	1850.
Alabama	678,489	600,103	475,510	437,770	345,109
Arkansas	309,117	210,666	122,169	111,259	47,703
Delaware	28,386	26,442	22,794	21,627	20,363
District of Columbia	75,572	59,596	43,404	14,316	13,746
Florida	166,180	126,690	91,689	62,677	40,242
Georgia	858,815	725,133	545,142	465,698	354,613
Kentucky	268,071	271,451	222,210	236,167	220,992
Louisiana	559,193	483,655	364,210	350,373	262,271
Maryland	215,637	210,236	175,391	171,131	165,091
Missouri	150,184	145,350	118,071	118,503	90,040
Mississippi	742,559	656,291	444,201	437,404	310,808
North Carolina	561,018	531,277	391,650	361,522	316,011

¹ Race Traits and Tendencies of the American Negro, by Frederick L. Hoffman, which was published in 1896, predicted the rapid decline of the American negro through the operation of inherent degenerative agencies. This work at the time attracted wide attention. The Twelfth Census has progressed far enough to show the utter erroneousness of Mr. Hoffman's conclusions. For answer to Mr. Hoffman's argument see Occasional Papers No. 1, American Negro Academy.

Negro population of the United States, by slave and free States—Continued.

State.	1890.	1880.	1870.	1860.	1850.
South Carolina	688,934	604,332	415,814	412,320	393,944
Tennessee	430,678	403,151	322,331	283,019	245,861
Texas	488,171	393,384	253,475	182,921	58,553
Virginia	635,438	631,616	512,841	548,907	523,861
West Virginia	32,690	25,886	17,980	-----	-----
Slave States	6,889,152	6,104,253	4,533,882	4,215,614	3,432,238
Maine	1,190	1,451	1,906	1,327	1,356
New Hampshire	614	685	580	494	520
Vermont	937	1,057	924	709	718
Massachusetts	22,144	18,697	13,947	9,602	9,064
Rhode Island	7,393	6,488	4,980	3,952	3,670
Connecticut	12,302	11,547	9,668	8,627	7,693
New York	70,092	65,104	52,081	49,005	49,069
New Jersey	47,638	38,853	30,658	25,336	24,046
Pennsylvania	107,596	85,535	65,294	56,949	53,626
North Atlantic division	269,906	229,417	179,738	156,001	149,762
Ohio	87,113	79,900	63,213	36,673	25,279
Indiana	45,215	39,228	24,560	11,428	11,262
Illinois	57,028	46,368	28,762	7,628	5,436
Michigan	15,223	15,100	11,849	6,799	2,583
Wisconsin	2,444	2,702	2,113	1,171	635
Minnesota	3,683	1,564	759	259	39
Iowa	10,685	9,516	5,762	1,069	333
Missouri ¹	150,184	145,350	118,071	118,503	90,040
North Dakota	373	401	94	-----	-----
South Dakota	541	-----	-----	-----	-----
Nebraska	8,913	2,385	789	82	-----
Kansas	49,710	43,107	17,108	627	-----
North Central Division	280,928	240,271	155,009	65,736	45,567
Montana	1,490	346	183	-----	-----
Wyoming	922	298	183	-----	-----
Colorado	6,215	2,435	456	46	-----
New Mexico	1,956	1,015	172	85	22
Arizona	1,357	155	26	-----	-----
Utah	588	232	118	59	50
Nevada	242	488	357	45	-----
Idaho	201	53	60	-----	-----
Washington	1,602	325	207	30	-----
Oregon	1,186	487	346	128	207
California	11,322	6,018	4,272	4,086	-----
Western division	27,081	11,852	6,380	4,479	1,240
Total free States	580,888	476,540	341,127	226,216	196,570
Slave States	6,889,152	6,104,253	4,533,882	4,215,614	3,432,238
United States	7,470,040	6,580,793	4,880,009	4,441,830	3,628,808

¹ Included in slave States.

This table shows that the tendency of the race is to settle in the Southern States. Notwithstanding considerable waves of immigration toward the North, 92 per cent of the race is still found in the South. Nor is there the slightest intimation that the mass center of the race will be disturbed by the northward movement. The dust may fly, but the solid earth will remain. Notwithstanding the influx of negroes toward the liberal States since emancipation, the increment in the free States from 1860 to 1890 had scarcely more than kept pace with the growth of the general negro population. All rivers run into the sea, and yet the sea is not full. This suggests the inability of the colored race to maintain itself in a higher latitude. But whether this inability is due to the rigidity of the climate or the frigidity of the social atmosphere is not apparent. The essential fact, however, remains. The Northern States are not likely to receive the negroes in such numbers as to relieve the South of its congested condition. It is often suggested as remarkable that the negro does not rush to the freer conditions of the North as a gas from a denser to a rarer medium. There civil and political rights are guaran-

teed, and educational privileges are ample and free alike to all. Why a people should prefer to remain in a region of repression, where their children must perforce be brought up without ample educational equipment, when they might remove many of these disabilities by crossing an imaginary line, might seem to be a great sociological mystery. But there are other deterrent causes that hinder. The negro is essentially a conservative race. It would rather bear the ills it has than fly to those it knows not of. The industrial proscription of the North is scarcely less depressing than the political suppression in the South. In the New England States, where the sentiment toward the negro is freest, there is evinced the least tendency to immigration. In all New England there are fewer negroes than can be found in the city of New Orleans. The increase of the negro element in the North Atlantic States from 1860 to 1890 was 73 per cent, or only 3 per cent above the general growth. The movement toward the West has been more general, but even this has not been marked enough to indicate a shifting of the base of population. A glance at the table showing the growth of the negro population by geographical divisions is sufficient to enforce the truth of this statement.

Negro population of the United States by geographical divisions.

	1890.	1880.	1870.	1860.	Increase from 1860 to 1890.
United States.....	7,470,040	6,580,793	4,880,009	4,441,830	3,028,210
Slave States	6,889,152	6,104,253	4,538,882	4,215,614	2,673,538
North Atlantic States.....	269,906	229,417	179,738	156,001	113,905
North Central Division ¹	280,928	240,270	155,009	65,736	215,192
Western Division	30,054	11,852	6,380	4,479	25,575
Total in free States	580,888	476,540	341,127	226,216	354,672

¹ Missouri is taken out of the column of the North Central States and placed with the slave States.

The above table shows that the increment in all the free States for the three decades from 1860 to 1890 was only 354,672, against 2,673,538 in the slave States. The entire negro population in the free States has remained constantly less than the colored element in the State of Alabama.

	1890.	1880.	1870.	1860.
Negroes in—				
Alabama	678,489	600,103	475,510	437,770
Free States	580,888	476,540	341,127	226,216

There is no mistaking the tendency of the bulk of the negro population to remain in the Southern States. The fascinating attractions of the North allure them not. The educational as well as the general sociological problems growing out of the presence of the negro must be worked out in the South, where the black man is destined to abide. As the localization of a national problem places too great burden on the afflicted States, the General Government should lend a hand toward wiping out the national reproach.

Negro population in border States.

States.	1860.	1870.	1880.	1890.	Increase from 1860 to 1890.
Delaware	21,627	22,794	26,442	28,386	6,758
Kentucky	236,167	222,210	271,451	268,071	31,904
Maryland	171,131	175,591	210,230	215,657	44,526
Missouri	118,503	118,071	145,350	150,184	31,681
Tennessee	283,019	322,331	403,151	430,678	147,659
Virginia	548,907	514,841	631,616	635,438	86,531
West Virginia		17,080	25,886	32,690	14,710
Total	1,379,354	1,391,618	1,714,126	1,761,104	363,770

The table shows that throughout all this region the race increase in thirty years was only 363,770, or 26 per cent, while the negro population at large increased during the same period 70 per cent. This slight apparent increment is due almost wholly to the growth of the city element. The rural negro in this section is growing scarcer and scarcer. If we could separate portions of West Tennessee, southeast Virginia, and southern Maryland, where the negro population is relatively dense and where its increase is normal, from the rest of the section under discussion, the tendency would be greatly accentuated.

Per cent of negro population in border States from 1860 to 1890, showing its relative decline.

States.	1860.	1870.	1880.	1890.
Kentucky	20.43	16.82	16.47	14.42
Maryland	26.36	22.46	22.49	21.07
Missouri	10.03	6.86	7.16	5.61
Tennessee	27.07	25.62	26.14	24.37
Virginia	34	49	41	38
West Virginia	4	4	4.1	4.2

We see that there has been a rapid relative decline throughout this section. In Kentucky the negro element declined in thirty years from 20 to 14 per cent and in Missouri from 10 to less than 6 per cent of the total population of the State.

Absolute decline of negro population outside of cities in the border States from 1880 to 1890.

States.	Outside of—	Decrease.
Delaware	1 city	258
Kentucky	2 cities	12,186
Maryland	1 city	7,961
Missouri	2 cities	5,332
Tennessee	3 cities	6,910
Virginia	2 cities	6,807
West Virginia		16,804

¹ Increase.

If we except a few cities, we see that there has been an absolute decline throughout the border region, except in West Virginia, which has had a great influx of negroes, owing to special industrial conditions which prevail. The reason for this tendency is not hard to seek or far to find. Where the negro is sparsely scattered among the white population, he is made painfully conscious of his isolation. He pines for consort with those of his color and kind. There are no schools for his children, or churches to meet his religious aspirations, or organizations to satisfy

his social desires. He is shut up to the dull routine of toil and can get only such social relaxations as the cold tolerance of his white neighbors may accord him. He is really in social captivity and pines for those communities where a more congenial environment prevails. The result is he either rushes to the cities or leaves the section for those communities where society is more congenial. The same tendency is noticeable in the Northern negro, or, rather, in the Southern negro who goes to the North. Although he comes from the farm, with whose life and methods he is tolerably well acquainted, he rarely seeks agricultural work in his new home, but goes to the cities, where he may affiliate with others of his race. The growth of negro churches in the North is significant of the same tendency. Wherever two or three dozen negroes meet together in a Northern community, there a colored church springs up among them to meet, in a large measure, their social needs and aspirations. This tendency is not to be marveled at, for the consciousness of kind is a strong incentive in all races. The Anglo-Saxon, with the spirit of enterprise, goes to the utmost ends of the earth to dwell among all kinds and conditions of men, but he never loses touch with the higher life of his race and is determined to live above the social level of the people among whom he dwells. He is also inspired by the hope of gaining a competency, so as to return to the congenial environment from whence he came or of making his new environment congenial by bringing it under control of his own race and its higher institutional life. If, however, he had to live like the negro, below the level of his social environment, with no conceivable outlook, he would doubtless pine as does the negro, and at the first opportunity fly to more congenial companionship with his own race and color.

Whatever may be the cause and its justification the effect remains the same.

In order to bring more prominently to light the serious educational problem that this movement in the population entails, let us notice a few typical counties in a single border State.

Negro population of certain counties of Kentucky from 1860 to 1890.

County.	Area.	Negro population.				Number of negroes to square mile.				Number of negroes to 100 whites in 1890.
		1860.	1870.	1880.	1890.	1860.	1870.	1880.	1890.	
	<i>Sq. miles.</i>									
Adair.....	400	1,662	1,836	2,171	1,828	4.1	4.5	5.4	4.5	15
Bath.....	270	2,641	2,702	2,017	1,578	9.8	10	7.5	5.8	14
Boyle.....	180	3,714	3,679	4,737	4,809	20.6	20.4	26.3	26.7	59
Butler.....	452	795	643	820	773	1.5	1.4	1.8	1.7	59
Carroll.....	165	1,087	540	771	757	6.6	3.3	4.7	4.6	9
Clay.....	580	611	495	706	413	1.1	.8	1.2	.7	3
Edmonson.....	348	284	226	555	458	.8	.7	1.6	1.3	6
Floyd.....	410	220	171	199	151	.5	.4	.5	.4	1
Grant.....	280	726	509	733	483	2.6	1.8	2.6	1.7	4
Hancock.....	200	831	729	803	758	4.2	3.6	4	3.3	9
Henderson.....	472	5,844	5,990	7,572	8,223	12.5	12.6	16	17.4	70
Jefferson.....	375	12,311	19,146	25,995	33,617	32.8	50.1	79.3	86.9	20
Knox.....	350	673	557	662	778	1.9	1.6	1.9	2.2	.6
Leslie.....	420			28	32			.06	.08	.8
Logan.....	544	6,726	5,723	7,381	6,569	12.3	10.5	15	12	30
Magoffin.....	300	147	179	150	160	.5	.6	.5	.5	1.7
Meade.....	332	1,954	1,294	1,274	769	6	3.9	3.8	2.3	8
Montgomery.....	200	2,892	2,699	3,566	3,643	14.4	13.5	17.8	18.2	41
Ohio.....	610	1,321	1,393	1,464	1,346	2.2	2.3	2.4	2.2	6
Perry.....	448	87	96	139	160	.2	.2	.3	.3	2
Rockcastle.....	280	397	369	437	155	1.4	1.3	1.5	.6	1.5
Simpson.....	320	2,403	2,167	2,797	2,374	7.5	6.8	8.7	7.4	28
Trimble.....	155	326	456	577	321	5.3	2.9	3.7	2	4
Webster.....	340	1,113	1,355	1,666	1,912	3.3	3.9	4.7	5.6	12

The foregoing table shows the evolution, or rather the retroaction, of the negro population in several counties in the State of Kentucky. In order that the coun-

ties selected might be impartially chosen, every fifth county was taken in alphabetical arrangement. It appears that in 19 out of 24 counties there were less than 10 negroes to the square mile, and in 6 counties the race did not average 1 to the square mile. It is also seen that there has been an absolute decline from 1860 to 1890 in 12 of the counties, and in 15 from 1880 to 1890. Throughout the counties under discussion it will be noticed that the negro element is very thin as compared with the white. If we suppose that this relation holds good for the entire State, as indeed we have every reason to believe, it will be seen that in two-thirds of the counties in Kentucky the negro averages less than 10 persons to the square mile, and in one-third of the State the average is less than 1 negro to the square mile. Not only is this true of Kentucky, but equally, or rather to a greater degree, will it hold for Missouri, and to a lesser extent, perhaps, for the other border States.

These States are pledged to the maintenance of separate schools with equal facilities for both races. How this can be done for the less numerous element of the population at a reasonable cost is the special educational problem which the border States present.

The growth and expansion of the so-called black belts in the South possess great sociological significance. Although our modern statesmanship has not consciously set apart a land of Goshen for the abiding place of the sable sojourners, nevertheless, this land is establishing itself by the sheer force of racial gravitation. The tendency of the negro population to cluster about black centers notwithstanding the operation of potent dispersive influences has been widely noted and remarked upon. A careful study of this population shows that it is solidifying along the river courses and in the fertile plains of the South, where it was most thickly planted by the institution of slavery. In order to bring this tendency clearly into evidence the following tables have been prepared on the basis of the Federal censuses.

Table I shows the number of counties in each State in which the negroes are more than twice as numerous as the whites, the aggregate areas of such counties, and their progressive changes during the three census decades, 1860-1890. The growth of this Africanized area has been remarkable. It increased from 71 counties with an aggregate area of 35,732 square miles in 1860 to 103 counties and 66,084 miles in 1890. While these "black belts" would have covered a territory as large as South Carolina at the beginning of the civil war, thirty years later they had grown to an area greater than that of all the New England States.

TABLE I.—*Counties in which negroes exceed the whites more than two to one.*

State.	1860.		1870.		1880.		1890.	
	Number of counties.	Area.	Number of counties.	Area.	Number of counties.	Area.	Number of counties.	Area.
		<i>Sq. miles.</i>		<i>Sq. miles.</i>		<i>Sq. miles.</i>		<i>Sq. miles.</i>
Alabama	7	5,862	11	8,676	11	8,676	11	8,676
Arkansas	1	760	3	2,024	6	4,103	6	4,103
Florida	1	910	3	2,792	2	1,510	2	1,510
Georgia	13	6,598	14	7,062	18	7,888	23	10,100
Louisiana	13	7,182	14	8,376	17	9,597	16	9,007
Mississippi	17	10,994	15	9,292	22	13,037	23	13,757
North Carolina	1	454	2	1,134	3	1,654	2	1,134
South Carolina	8	8,186	8	5,456	12	9,343	12	11,699
Tennessee					1	630	1	630
Texas	2	2,230	3	3,200	3	3,200	3	3,200
Virginia	8	2,236	6	1,756	7	2,059	4	1,218
Total	71	35,732	79	48,568	92	62,707	103	66,084

TABLE II.—“Black belts” in which negroes exceed whites more than two to one.

States in which the “black belt” is located.	1860.			1870.		
	Negro population.	White population.	Negroes to 100 whites.	Negro population.	White population.	Negroes to 100 whites.
Alabama	147,396	52,292	281	226,950	73,085	315
Arkansas	7,512	1,722	436	18,469	7,940	232
Florida	9,149	3,194	284	34,631	11,331	305
Georgia	85,298	34,331	245	102,682	37,809	271
Louisiana	129,568	33,948	352	101,754	40,730	248
Mississippi	210,968	61,382	342	179,237	60,004	298
North Carolina	10,803	4,923	219	26,482	11,694	226
South Carolina	145,839	48,885	298	164,771	64,294	256
Tennessee						
Texas	9,242	4,047	228	20,167	7,705	264
Virginia	48,554	20,669	240	35,978	15,989	225
Total	804,329	265,393	303	911,121	330,581	276

States in which the “black belt” is located.	1880.			1890.		
	Negro population.	White population.	Negroes to 100 whites.	Negro population.	White population.	Negroes to 100 whites.
Alabama	274,420	76,910	368	285,513	75,040	380
Arkansas	64,495	20,827	309	93,398	26,888	311
Florida	29,508	6,219	476	26,830	6,679	402
Georgia	193,823	76,121	254	210,075	79,806	261
Louisiana	191,050	55,890	341	200,620	55,925	358
Mississippi	350,897	101,001	347	401,639	110,436	362
North Carolina	66,608	22,481	296	53,774	15,494	211
South Carolina	303,192	118,904	255	318,113	114,806	277
Tennessee	22,238	9,633	231	20,492	8,386	244
Texas	32,228	12,097	266	35,695	13,116	272
Virginia	49,785	21,259	234	26,309	11,965	219
Total	1,583,244	521,342	304	1,652,458	517,571	319

TABLE III.—Counties in which there are from 100 to 200 negroes to 100 whites.

State.	Number of counties.				Population in 1890.		Number of negroes to 100 whites.
	1860.	1870.	1880.	1890.	Negro.	White.	
Alabama	13	11	13	8	106,387	81,738	130
Arkansas	5	5	7	9	67,375	52,818	127
Florida	5	4	7	8	80,824	57,631	140
Georgia	30	41	42	39	380,425	278,863	136
Louisiana	19	19	19	17	176,695	120,425	147
Maryland	5	3	2	2	13,201	11,850	119
Mississippi	15	17	16	16	191,420	147,016	139
North Carolina	19	15	19	14	142,496	105,115	135
South Carolina	12	13	13	14	274,330	184,954	147
Tennessee	3	2	2	2	77,209	59,089	130
Texas	5	4	5	6	36,895	28,595	128
Virginia	35	36	33	30	251,367	183,905	137
United States	166	170	178	165	1,772,614	1,312,009	135

Table II shows the relative density of the negro population within the area described by Table I. There are, on the average, more than three negroes to each white person. The negro population is increasing far more rapidly than the white, having increased from 3.03 times the white in 1860 to 3.19 times in 1890; and, what is, perhaps, more surprising, is the rapid increase of this ratio during the census decade 1880-1890, which showed such a marked decline in the general increment of the negro population; 1,652,458 negroes, or nearly one-fourth of the entire race, were found in these “black belts” in 1890, against 804,329, or about one-fifth of the race, in 1860.

Tables I and II, taken together, show an unmistakable tendency of these "black belts" to increase, both in extent and intensity. The probability is that they will not only maintain themselves, but will expand with the coming decade. Much criticism has been heaped upon the successive censuses on account of alleged errors, both of an excessive and defective character; but the discrepant enumerations do not affect the tendency herein noted. This growth is steady and unmistakable. We can predict with fullest assurance that the twelfth census will confirm this general law of growth.

Table III shows the number of counties in each State in which the negroes are in the majority but less than twice as numerous as the whites, together with the aggregate population of such counties in 1890, and the number of negroes to every 100 whites. This area is much larger than that considered in Table I, and has remained almost stationary during the decades under consideration. There are 165 counties and about 100,000 square miles in this region. There are, on the average, 135 negroes to every 100 whites. Tables I and III show that the entire region in which negroes are in the numerical majority embraces 268 counties and covers an area as large as the North Atlantic division of States. There are 3,400,000 negroes, against 1,800,000 whites. Nearly one-half of the entire race is found within this Goshenized territory. We often speak of the "black belts" as being congested, but this must refer to the constantly thickening darkness and not to the absolute density of the population; for, as noted above, these belts form an area about the size of the North Atlantic States. The total population is about 5,000,000, while the North Atlantic States have a population of 17,000,000. The average density of the population is less than one-third that of the States in the higher latitude. The indications are that the negro will be able to maintain the ground already gained, but will not be able to make further headway against the "white man's country."

The opposite tendency in the Southern population is also noticeable. Just as the black spots are growing blacker the white spots are growing whiter. The line of cleavage seems to take place where the two races are about evenly balanced, and the relative densities increase in both directions. In those counties where the negroes constitute only a small fraction of the total population their relative decline is notable.

If we turn to the cities, we find the same tendency toward a geographical separation of the races. There are 25 cities with a total negro population of more than half a million. A careful study of their distribution will show that they are segregated in districts and wards as definitely marked as the "black belts" of the South. The politician is as familiar with the black and the white wards of our large cities as is a seaman with the depths and shallows of the sea.

There are several causes which conspire to perpetuate the segregative tendencies of the negro population:

1. Under the social conditions now prevailing the negro is compelled to flock with his kind. He is thrown back upon himself by the expulsive power of prejudice. The negro possesses the social instinct in a high degree, and can not endure isolation. The thinly veneered tolerance which he receives when scattered promiscuously among the whites by no means satisfies his longings. He longs for his own church and society and forms of social life.

2. The white population shuns open rivalry or contact with the negro on terms of equality. Wherever white men and women have to work for a living, they avoid those sections where they have to compete with the negroes; and if indigenous to such localities, they often migrate to where the black rival is less numerous. For this reason immigration avoids the "black belts." Whenever a community of Northern agriculturists settle in the South, they usually select a white neighborhood, and, in some instances at least, they have been known to "freeze out" the negroes by methods of their own devising.

3. As manufacturing industry moves southward, the poor country whites will be drawn to the cities as operatives and workmen along lines of higher mechanical skill, leaving the negro in vast numerical preponderance in the agricultural districts.

These factors operating separately and cooperating conjointly will perpetuate the "black belts" of the South and make permanent this modern land of Goshen.

The political, social, and industrial future of these localities is a matter of serious importance. These belts are so distributed among the States that they can not maintain political integrity. They do not follow the Atlantic coast line, but are only tangential to it at several points, and therefore their commercial importance is materially lessened. The negro constitutes a majority in only two States; but even in these the white man's superior political sagacity will enable him to maintain governmental control for any calculable period of time.

The educational, social, and industrial life must be elevated by the negro himself under the stimulus of local and national assistance. It is here that must be worked out the future of the race on this continent. The great masses will be gathered in these belts or in the corresponding black wards of our large cities, from which the volatile particles will fly off in all directions to be dissipated and lost.

It is no reproach to these people to say that if left to themselves they would lapse into barbarism. No people, unaided, can lift themselves from a lower to a higher level of civilization. It is a social, as it is a physical, impossibility to lift one's self by pulling against the straps of one's own boots. But this land of Goshen is not to be left alone; there will always be a number of whites affiliating with the negroes for purposes of philanthropy or gain. Hampton and Tuskegee and Fisk are types of philanthropic helpfulness. There is need of autochthonous enterprise. Young men of ambition and education will be forced to such communities as a field to exploit their powers. The secret and method of New England may thus be transplanted to the South by the hands and brains of sons of Ethiopia. It is here that the great educational and developmental problems must be worked out.¹

II.—THE STRUGGLE FOR EDUCATION—PERSONAL AND ECONOMIC SACRIFICE.

A full knowledge of the education of the negro can not be had without making some reference to the earlier educational efforts. It is well known that slavery discouraged the dissemination of literary knowledge among persons of African descent, and, in most cases, this discouragement amounted to a positive prohibition. But despite the rigid regulations of the slave régime there were many kind-hearted slaveholders who taught their slaves to read and write. Many others picked up such knowledge in ways which it is mysterious to comprehend. The fact that book information was withheld from the negro made him all the more anxious to acquire it. Stolen waters are sweet, and the fact that they are forbidden leads those from whom the privilege is withheld to suspect that they possess mysterious efficacy. Such hungering and thirsting after knowledge amid dark and dismal discouragements is surely a compliment to the intellectual taste of the African. The antebellum struggles of the free colored people and the more ambitious slaves to acquire the use of printed characters is almost incomprehensible, in view of the liberal educational provisions of these latter days. The experience of Frederick Douglass was not without many parallels and counterparts. In his autobiography he tells us:

The most interesting feature of my stay here [in Baltimore] was my learning to read and write under somewhat marked disadvantages. In obtaining this knowl-

¹ This chapter was written before the figures of the Twelfth Census were available. This census, however, in so far as it has been completed, confirms the conclusions of this chapter in every essential particular. See *Forum*, February, 1902, "Expansion of the Negro Population."

edge I was compelled to resort to indirections by no means congenial to my nature and which were really humiliating to my sense of candor and uprightness. My mistress, checked in her benevolent designs toward me, not only ceased instructing me herself, but set her face as a flint against my learning to read by any means.¹

She would rush at me with the utmost fury, and snatch the book or paper from my hand with something of the wrath and consternation which a traitor might be supposed to feel on being discovered in a plot by some dangerous spy. The conviction once thoroughly established in her mind that education and slavery were incompatible with each other, I was most narrowly watched in all my movements. If I remained in a separate room from the family for any considerable length of time, I was sure to be suspected of having a book, and was at once called to give an account of myself. Teaching me the alphabet had been the "inch" given; I was now waiting only for the opportunity to take the "ell." Filled with determination to read at any cost, I hit upon many expedients to attain my desired end. The plan which I mainly adopted, and the one which was most successful, was that of using my white playmates, with whom I met in the streets, as teachers. I used to carry almost constantly a copy of Webster's Spelling Book in my pocket, and when sent on errands, or when playtime was allowed me, I would step aside with my young friends and take a lesson in spelling.²

Meanwhile, I resolved to add to my educational attainments the art of writing. After this manner I began to learn to write. I was much in the shipyard, and observed that the carpenters, after hewing and getting ready a piece of timber to use, wrote on the initials of the name of that part of the ship for which it was intended. When, for instance, a piece of timber was ready for the starboard side, it was marked with a capital "S"; a piece for the larboard side was marked "L"; larboard aft marked "L. A."; starboard aft "S. A."; starboard forward "S. F." I soon learned these letters, and for what they were placed on the timbers. My work now was to keep fire under the steambox, and to watch the shipyard while the carpenters had gone to dinner. This interval gave me a fine opportunity to copy the letters named. I soon astonished myself with the ease in which I made the letters, and the thought was soon present, if I can make four letters, I can make more. With playmates for my teachers, fences and pavement for my copy books, and chalk for my pen and ink, I learned to write.³

This was the university training of the most illustrious American negro, which could be duplicated by thousands of his fellow-slaves who remained "mute and inglorious."

A different and less strenuous phase of early educational opportunities may be found in the experience of another distinguished colored American, the late Prof. John Mercer Langston. Mr. Langston thus recounts the early schooling of his brother:

His father (a Virginia white man), manifesting the deepest interest in him, sought by his own efforts and influence to give him such thorough English education, with general information, and mental and moral improvement, as to make him a useful man. He [at 7 years] was required to appear for his recitations in his father's special apartments the year around at 5 o'clock in the morning.⁴

A second brother was put through the same régime, and John M., though too young for definite training when his father died, had ample provision made for his education.⁵

These citations represent two phases of negro education before the civil war. The one gives a picture of the dauntless, self-impelling determination to gain knowledge at any cost; the other, the kind and genial disposition of a father-master, in spite of the rigorous requirements of the law. These instances may be regarded as typical, and might be multiplied by hundreds and thousands. There were also organized efforts for the education of the colored race. Schools were established for the free colored people within the limits of the slave territory. These were mainly in the large cities. A careful and detailed study of such early educational efforts for the several States and cities affords a rich field for interesting and valuable monographic writing. This chapter attempts little more than to

¹ Life and Times of Frederick Douglass, p. 72.

² Ibid, p. 74.

³ Ibid, pp. 85-86.

⁴ From Virginia Plantation to the National Capitol, by John M. Langston, pp. 19-20.

⁵ Ibid, p. 20.

present some of the hindrances, embarrassments, personal and economic sacrifices under which the negro in the slave territory labored during the dark days of slavery, in order to secure what he considered the talismanic power of knowledge.

The Report of the Commissioner of Education for 1868 contains an interesting and exhaustive study upon "The legal status of the colored population in respect to schools and education in the different States." As this work is now out of print, a recount of some of the antebellum school laws and regulations may not be without interest. The sources of information for the following citations are the Report just referred to, Williams's History of the Negro Race, Chapter XII on Negro School Laws, and R. R. Wright's Historical Sketch of Negro Education in Georgia.

In Alabama the law of 1832 provided that "any person or persons that shall attempt to teach any free person of color, or slave, to spell, read, or write, shall, upon conviction thereof by indictment, be fined in a sum not less than \$250, nor more than \$500."

In 1833 the mayor and aldermen of the city of Mobile were authorized by law to grant licenses to such persons as they might deem suitable to instruct for limited periods the free colored creole children within the city and in the counties of Mobile and Baldwin, who were the descendants of colored creoles residing in said city and counties in April, 1803, provided, that said children first receive permission to be taught from the mayor and aldermen and have their names recorded in a book kept for the purpose. This was done, as set forth in the preamble of the law, because there were many colored creoles there whose ancestors, under the treaty between France and the United States in 1803, had the rights and privileges of citizens of the United States secured to them.

Arkansas seems to have had no law on the statute book prohibiting the teaching of persons of African descent, although the law of 1838 forbade any white persons or free negro from being found in the company of slaves or in any unlawful meeting, under severe penalty for each offense. In 1843 all migrations of free negroes and mulattoes into the State was forbidden.

There was no law expressly forbidding the instruction of slaves or free colored people in the State of Delaware until 1863, when a positive enactment against all assemblages for the instruction of colored people, and forbidding all meetings except for religious purposes and for the burial of the dead, was made.

While the free colored people were taxed to a certain extent for school purposes, they could not enjoy the privileges of public instruction thus provided, and were left for many years to rely principally upon individual efforts among themselves and friends for the support of a few occasional schools. In 1840 the Friends formed the African School Association in the city of Wilmington, and by its aid two very good schools, male and female, were established in that place.

In 1828 the State of Florida passed an act to provide for the establishment of common schools, but white children only of a specified school age were entitled to school privileges.

In Georgia the following law was enacted in 1829:

If any slave, negro, or free person of color, or any white person, shall teach any other slave, negro, or free person of color to read or write, either written or printed characters, the said free person of color or slave shall be punished by fine and whipping, or fine or whipping, at the discretion of the court; and if a white person so offend he, she, or they shall be punished with a fine not exceeding \$500 and imprisonment in the common jail, at the discretion of the court.

In 1833 a penalty not exceeding \$500 was provided for the employment of any slave or free person of color in setting up type or other labor about a printing office requiring a knowledge of reading or writing. The code remained in force until swept away by events of the civil war.

In 1833 the city of Savannah adopted an ordinance that if any person should teach or cause to be taught any slave or free person of color to read or write within

the city, or who shall keep a school for that purpose, he or she shall be fined in a sum not exceeding \$100 for each and every such offense; and if the offender be a slave or free person of color, he or she may also be whipped not exceeding 39 lashes.

Notwithstanding this severe enactment, there were, nevertheless, several schools for colored children clandestinely kept in Augusta and Savannah. The poor whites would often teach negro children clandestinely. If an officer of the law came round the children were hastily dispatched to the fictitious duty of "picking up chips." The most noted negro school was opened in 1818 or 1819 by a colored man from Santo Domingo. Up to 1829 this school was taught openly. The law of that year made concealment and secrecy a necessity.¹

In Kentucky the school system was established in 1830. In this provision the property of colored people was included in the basis of taxation, but they were excluded from school privileges.

Louisiana, in 1830, provided that whoever should write, publish, or describe anything having a tendency to produce discontent among the free population or insubordination among the slaves, should upon conviction be imprisoned at hard labor for life or suffer death, at the discretion of the court. It was also provided that all persons who should teach or permit or cause to be taught any slave to read or write should be imprisoned not less than one month or more than twelve.

In 1847 a system of public schools was established for the education of white youth, and one mill on the dollar upon the ad valorem amount of the general list of taxable property might be levied for its support. Prior to the civil war the only schools for colored youth in Louisiana were a few private ones in the city of New Orleans among the creoles.

St. Francis Academy for colored girls was founded in connection with the Oblate Sisters, in Baltimore, Md., and received the sanction of the Holy See October 2, 1831. There were many colored Catholic refugees who came to Baltimore from Santo Domingo. The colored women who formed the original society which founded the convent and seminary were from Santo Domingo. The Sisters of Providence is the name of a religious society of colored women who renounced the world to consecrate themselves to the Christian education of colored girls. This school is still in successful operation. A colored man by the name of Nelson Wells left by will to trustees \$7,000, the income of which was to be applied to the education of free colored children. The Nelson Wells school continued from 1835 to the close of the civil war.

Dr. Bokkelen, State superintendent of education, recommended in 1864 the establishment of colored schools on the same basis as those of the whites, and states in his recommendation—

I am informed that the amount of school tax paid annually by these (colored) people to educate the white children in the city of Baltimore for many years has been more than \$500. The rule of fair play would require that this be refunded unless the State at once provided schools under this title.

By an act of January, 1833, the legislature of Mississippi provided that the meeting of slaves and mulattoes above the number of five at any place or public resort or meetinghouse in the night or at any schoolhouse for teaching reading or writing in the day or night was to be considered an unlawful assembly. In 1846 an act was passed establishing a system of public schools from all escheats and all fines, forfeitures, and amercement from licenses to hawkers and all income from school lands. These schools were for the education of white youths.

The legislature of Missouri in 1847 provided that no person should teach any schools for negroes or mulattoes.

In North Carolina until 1835 public opinion permitted the colored residents to maintain schools for the education of their children. These were taught sometimes by white persons, but frequently by colored teachers. After this period colored children could only be educated by confining their teaching within the

¹ Negro Education in Georgia, by R. R. Wright, p. 20.

circle of their own family or by going out of the limits of their own State, in which event they were prohibited by law from returning home. The public system of North Carolina declared that no descendant of negro ancestors to the fourth generation, inclusive, should enjoy the benefits thereof.

In 1740, while yet a British colony, South Carolina took the lead in directly legislating against the education of the colored race—

Whereas the having of slaves taught to write, or suffering them to be employed in writing, may be attended with inconvenience, be it enacted, That all and any person or persons whatsoever, who shall hereafter teach or cause any slave or slaves to be taught, or shall use or employ any slave as scribe in any manner of writing whatever, hereafter taught to write, every such person or persons shall for every such offense forfeit the sum of £100 current money.

In 1800 free colored people were included in this provision. In 1834 it was provided—

If any person shall hereafter teach any slave to read or write, or shall aid or assist in teaching any slave to read or write, or cause or procure any slave to be taught to read or write, such person, if a free white person, upon conviction thereof shall, for each and every offense against this act, be fined not exceeding \$100 and [suffer] imprisonment not more than six months; or if a free person of color, shall be whipped not exceeding 50 lashes. * * * And if any free person of color or slave shall keep any school or other place of instruction for teaching any slave or free person of color to read or write, such free person of color or slave shall be liable to the same fine, imprisonment, and corporeal punishment.

And yet there were colored schools in Charleston from 1744 to the close of the civil war.

In 1838 Tennessee provided a system of public schools for the education of white children between the ages of 6 and 16, but the colored children never enjoyed any of its benefits, although the free colored people contributed their due share of the public fund.

Texas never expressly forbade the instruction of negroes, although the harsh and severe restrictions placed upon the race made such a provision scarcely necessary.

In 1831 the general assembly of Virginia enacted, among others, the following provisions:

That all meetings of free negroes or mulattoes at any schoolhouse, church, meetinghouse, or other place for teaching them reading or writing, either in the day or night, under whatsoever pretext, shall be deemed an unlawful assembly. * * * If any white person or persons assemble with free negroes or mulattoes at any schoolhouse, church, meetinghouse, or other place for the purpose of instructing such free negroes or mulattoes to read or write, such person or persons shall, on conviction thereof, be fined in a sum not exceeding \$50, and, moreover, may be imprisoned, at the discretion of a jury, not exceeding two months.

It is known, however, that schools for colored children were established and maintained in such cities as Petersburg, Norfolk, and Richmond.

The early educational efforts of the colored people of the District of Columbia have been studied with more fullness than those of any other Southern community. He who presents the movement in Baltimore, Richmond, Louisiana, Charleston, and other Southern centers with as much detail and accuracy will render no inconsiderable service to the history of education.

There does not seem to have been any express law forbidding the education of colored people in this District. In 1807 the first schoolhouse for the use of colored pupils was erected by three colored men—George Bell, Nicholas Franklin, and Moses Liverpool—not one of whom knew a letter of the alphabet. They had been former slaves in Virginia, and, like others of their condition, had an exalted notion of literary knowledge. A white teacher was secured. From this time to the opening of the new régime, brought on by the civil war, there was a tolerably adequate number of schools, supported mainly by the colored people themselves, but not

without assistance from Northern philanthropy. But that these schools did not always have plain and smooth sailing may be gathered from the fact that in 1835, on account of an alleged indiscreet utterance of a colored resident, colored schools were attacked by a mob, some of them burned, and property destroyed, while the most conspicuous negro teacher, Mr. John F. Cook, was compelled to flee for his life. This outbreak is known as the snow riot.

Many of the best-known names in the District were both products of and factors in these early schools, the most noted of whom, perhaps, is Mr. John F. Cook, who subsequently became tax collector of the District of Columbia. For substance, dignity, and influence he stands as one of the conspicuous names of the national capital, regardless of race distinction. His brother, George F. T. Cook, who was both a pupil and a teacher in the antebellum schools, subsequently became superintendent of the colored public schools of Washington and Georgetown, which position he held for thirty years.

This survey has been limited to the Southern or slave States. In the free States of the North the negro had a more picturesque and exciting educational experience. The Northern States did not expressly forbid the education of colored persons, but the hostility to such movements is attested by many a local outbreak.

It was amid such dangers and difficulties that the negro began his educational career. It must not be for a moment supposed, however, that the laws above referred to were rigidly enforced. It is known that pious and generous slaveholders quite generally taught their favorite slaves to read, regardless of the inexorable provisions of law. Quite a goodly number also learned the art of letters somewhat after the furtive method of Frederick Douglass, and in the cities schools for negroes were conducted in avoidance, connivance, or defiance of ordinances and enactments.

In 1865 there was to be found in every Southern community a goodly sprinkling of colored men and women who had previously learned how to read and write.

The censuses of 1850 and 1860 give the number of free colored people attending school in the several States. These figures, for obvious reasons, represent only a small fraction of the negroes, free and slave, who were openly or furtively gaining the elements of literary knowledge. The decline in avowed school attendance between 1850 and 1860 is due to the growing intensity of feeling which culminated during that decade.

Free negroes attending school.

State.	1850.	1860.	State.	1850.	1860.
Delaware	187	250	Texas	20	11
Maryland	1,616	1,355	Arkansas	11	5
District of Columbia	467	678	Tennessee	70	52
Virginia	64	41	Kentucky	288	209
North Carolina	217	133	Missouri	40	153
South Carolina	80	365			
Georgia	1	7	Slave States	4,414	3,661
Florida	66	9	Free States	28,213	22,800
Alabama	68	114			
Mississippi	2	2	Total	32,627	26,461
Louisiana	1,219	275			

It will be noticed that most of the enactments against the education of the negro were made subsequently to 1830. The Nat Turner insurrection and the opening up of the antislavery campaign in the North had a decidedly reactionary effect in the slave territory.

A people who have made such sacrifice and run such risks for the sake of knowledge, who of their own scanty means were ever willing to support schools for the education of their children, although their property had been taxed for

the support of an educational system from which they were excluded, surely deserves a larger and fuller draught of that knowledge of which the régime of slavery permitted them to gain only a foretaste. The civil war wiped out all of these restrictions, and at its close the Freedmen's Bureau, religious and benevolent associations, and the reconstructed governments of the former slave States threw wide open the gate of knowledge.

The avidity and zeal with which the erstwhile suppressed population seized upon the new opportunity furnishes the most interesting chapter in the history of American education. Educational opportunities were thus thrown open to a people who desired and needed them above all, and who had shown by long and persistent endeavor that they were fully worthy and deserving of them.

III. SEPARATE SCHOOL PROVISIONS.

Although the reconstruction governments have been charged with every known public sin, yet they have one conspicuous countervailing claim to the everlasting gratitude of the South. They established the public school system upon a broad and enduring foundation, making provision for the education of all children regardless of race or color. The South will search its records in vain for another act of statesmanship fraught with so much wisdom and beneficent consequences. No one has yet had the temerity to question the wisdom of this one redeeming memorial to the hated reconstruction régime. Be it said to the credit of the white people of the South, that when they regained political ascendancy they undertook to strengthen, rather than to upset the educational propaganda originated by their political foes.

The avowed policy of the Southern people is that equal, but separate, educational facilities shall be provided for the two races. This is with them a fundamental principle, concerning the wisdom of which it would be a mere waste of time to contend. It is the most vital clause in their social creed, and has become embedded in the fundamental and organic laws of the several States, being as fixed and invariable as the laws of the Medes and Persians. The following citations will show the unanimity of the several Southern States as to scholastic separation of the races:

Alabama.—The general assembly shall establish, organize, and maintain a system of public schools throughout the State for the equal benefit of the children thereof between the ages of 7 and 21 years; but separate schools shall be provided for children of African descent. (School Laws, p. 3.)

Arkansas.—Intelligence and virtue being the safeguards of liberty, and the bulwark of free and good government, the State shall ever maintain a general, suitable, and sufficient system of free schools, whereby all persons in the State, between the ages of 6 and 21 years, may receive gratuitous instruction. (School Laws, 1897, p. 9.)

The said board shall make provisions for establishing separate schools for white and colored children and youths. (Ibid., p. 48.)

District of Columbia.—Separate schools for white children and for colored children shall be provided. (Rules of Board of Education, 1901, p. 1.)

Florida.—White and colored children shall not be taught in the same school, but impartial provisions shall be made for both. (School Laws, 1897, p. 12.)

It shall be a penal offense for any individual, body of individuals, corporation or association, to conduct within this State any school of any grade, public, private, or parochial, wherein white persons and negroes shall be instructed or boarded within the same building, or taught in the same class, or at the same time by the same teacher. (Ibid., chaps. 43-45, sec. 1.)

Any person or persons violating the provisions of section 1 of this act, by patronizing or teaching in such school shall, upon conviction thereof, be fined in a sum not less than \$150 nor more than \$500, or imprisoned in the county jail for not less than three months nor more than six months for every such offense. (Ibid., sec. 2.)

Georgia.—It shall be the duty of said board of education to make arrangements for the instruction of the children of the white and colored races in separate

schools. They shall, as far as practicable, provide the same facilities for both races in respect to attainments and abilities of teachers and length of term time; but the children of the white and colored races shall not be taught together in any common or public school of this State. (School Laws, 1897, p. 15.)

Kentucky.—There shall be maintained throughout the State of Kentucky a uniform system of common schools. * * * It shall not be lawful, under any of the provisions of this chapter, for any white child to attend any common school provided for colored children, or for any colored child to attend any common school provided for white children. (School Laws, 1897, chap. 154.)

Maryland.—It shall be the duty of the board of county school commissioners to establish one or more public schools in each election district for all colored youth between 6 and 20 years of age, to which admission shall be free, and which shall be kept open as long as the other public schools of the county: *Provided*, The average attendance be not less than 10 scholars for two consecutive terms. (School Laws, 1898, sec. 96.)

Each colored school shall be under a separate board of school trustees, to be appointed by the board of county school commissioners, and shall be under the same laws for its government and furnish instruction in the same branches as schools for white children. (Ibid., sec. 7.)

Mississippi.—There shall be maintained a uniform system of free public schools for all children between the ages of 5 and 21 years. (School Laws, 1894, sec. 3162.)

Separate schools shall be maintained for children of the white and colored races. (Ibid., sec. 207.)

Missouri.—Separate free schools shall be established for the education of children of African descent; and it shall hereafter be unlawful in public schools of this State for any colored child to attend any white school or for any white child to attend any colored school. (School Laws, 1893, p. 17.)

North Carolina.—The school commissioners shall establish and locate in the districts, schools for the white race and schools for the colored race. (School Laws, 1897, sec. 2550.)

South Carolina.—The general assembly shall provide for a liberal system of free public schools for all children between the ages of 6 and 21 years.—(Constitution, 1895.)

Separate schools shall be provided for children of the white and colored races, and no child of either race shall ever be permitted to attend a school provided for children of the other race. (Ibid.)

Tennessee.—There shall be established and maintained in this State a uniform system of public schools. (School Laws, 1895, sec. 1.)

Nothing in this act shall be so construed as to allow or permit mixed schools of the white and colored population, but such schools shall be taught separately, as now provided by law. (Ibid., p. 23.)

Texas.—The children of the white and colored races shall be taught in separate schools, and in no case shall any school consisting partly of white and partly of colored children receive any aid from the public school fund. (School Laws, 1899, sec. 16.)

All the available public school funds of this State shall be appropriated in each county for the education alike of white and colored children, and impartial provisions shall be made for both races. (Ibid., sec. 13.)

Virginia.—White and colored persons shall not be taught in the same school, but in separate schools, under the same general regulations as to management, usefulness, and efficiency. (School Laws, 1892, sec. 77.)

West Virginia.—White and colored persons shall not be taught in the same school. (School Laws, 1897, p. 17.)

This separation of races raises important economic questions. It is well known that a dual scheme of schools covering a sparsely settled territory practically duplicates the expense of a unified system. Although race prejudice proves to be very expensive, yet the white South is pledged to its maintenance at any cost. The wisdom of this policy is not a profitable subject of discussion. The policy emphasizes the necessity of outside aid for the education of both classes of children.

Number of persons to the square mile, 1890.

State.	Total.	White.	Colored.
Maine.....	22.11		
New Hampshire.....	41.81		
Vermont.....	36.39		
Massachusetts.....	271.48		
Rhode Island.....	317.44		
Connecticut.....	154.63		
New York.....	125.95		
New Jersey.....	196.82		
Pennsylvania.....	116.88		
North Atlantic Division.....	101.37		
Delaware.....	85.97	60.49	14.48
Maryland.....	105.72	83.85	21.87
District of Columbia.....	3,839.87	2,590.40	1,249.47
Virginia.....	41.27	25.44	15.83
West Virginia.....	30.95	29.65	1.30
North Carolina.....	35.90	21.85	11.45
South Carolina.....	36.18	15.42	22.74
Georgia.....	31.15	16.60	14.55
Florida.....	7.22	4.17	3.05
South Atlantic Division.....	32.98		
North Central States.....	29.68		
South Central Division.....	18.94		
Western Division.....	2.58		
Missouri.....	38.98	36.79	2.19
Kentucky.....	46.47	39.73	6.71
United States.....	21.31		

The accompanying table shows the relative density of the population for the several geographical divisions of the United States. It is noticeable that the slave States as a group are more sparsely settled than any other section of the country, excepting, of course, the far West, with its vast stretches of uninhabited and uninhabitable spaces. The difficulty of maintaining a duplicate system of schools for such a population is clearly apparent. The inevitable result is inferior scholastic accommodations and greater hardship on the part of the pupils in securing them. Pennsylvania has an average density of 116 persons to the square mile, while Georgia has only 31, or, to count the two independent component elements, $16\frac{1}{2}$ white, and $14\frac{1}{2}$ colored. The State must be covered with a dual system of schools for the accommodation of the two component classes. If the two States were equal in proportional financial ability, and if both had a unified system, Pennsylvania could maintain far more efficient schools, because of the relative density of the pupils to be taught; but when we take into account the relative fiscal status and the solidified system in the one, and the bifurcation of funds and facilities in the other, the educational possibilities of the two become startlingly disproportional. Georgia and Iowa have approximately the same area and population. The school expenditure for Georgia in 1899-1900 was \$1,807,815; for Iowa, \$8,583,417. The population in both States is mainly rural. And yet Georgia, with only one-fourth of the school funds, must do twice the work of its northern counterpart. The result is inevitable. A dollar will go no further in Georgia than in Iowa, and a dollar applied to the education of the negro will accomplish no more than one applied to the education of a white child.

These instances are but typical of the relative educational conditions which prevail in the Northern and Southern States. National aid alone can bring the latter up to the requisite educational status.

In the second place these States, by clear declaration or imperative inference, are pledged to equal school facilities for both races. The general school fund should therefore be apportioned between the races on the basis of relative numerical strength. The colored element being shorn of political power, is wholly at the

mercy of the whites for the carrying out of this provision. It will be seen also that the schools for the less numerous race, provided equal facilities are afforded, must be proportionately more expensive than for the race numerically dominant. In all the Southern States, therefore, except South Carolina, Mississippi, and Louisiana,¹ the cost of education of the negro would relatively exceed that of the whites. Several of the States—notably Maryland, Kentucky, and Delaware—apportion only that portion of local school taxes paid by colored property holders to colored schools. The Maryland law requires that “the total amount of taxes paid for school purposes by the colored people of any county, or in the city of Baltimore, together with any donation that may be made for this purpose, shall be devoted to the maintenance of schools for colored children.”²

This does not of necessity limit the provision for colored schools to the taxes paid by colored people. It is not imperative, but permissive; and in some of the counties at least the practice prevails.

The school laws of Kentucky are more emphatic: “But no tax shall be levied upon the property or poll or any services required of any white person for the benefit of a school for colored children; and no tax shall be levied upon the property or poll or any services required of any colored person for the benefit of a school for white children.”³

In the school report for the county of Sussex, Del., 1892, we find the following components of the educational fund for the colored race:

Amount from State.....	\$2,783.33
Unexpended balance for books.....	114.93
Amount of colored taxes.....	569.89
Unexpended balance for salaries.....	45.78
Total.....	3,513.93
Reserved for books.....	464.04
Balance applied to salaries.....	3,049.89

The State fund is of course distributed equally according to population, the application of taxes from negro property holders to negro education applying only to county or local provisions.

In these States we have an indication of the general policy which has sometimes been advocated of assigning to colored education only the proportional taxes paid by that race. As a matter of fact the educational fund in the South is not equally apportioned between the two races except in a few States. The accompanying table clearly indicates the inequality of distribution:

Per capita expense of white and colored schools, 1897-98.⁴

State.	Expenditure.		Estimated number of children 5 to 18.		Per capita cost of education.	
	White.	Colored.	White.	Colored.	White.	Colored.
District of Columbia.....	⁵ \$692,547	⁶ \$273,382	46,720	25,700	\$14.82	\$10.64
Florida.....	565,465	171,486	95,460	75,640	5.92	2.27
Kentucky.....	⁶ 2,586,032	⁶ 322,322	570,000	97,500	⁶ 4.59	⁶ 3.34
Maryland.....	2,388,721	320,383	272,700	78,700	8.76	4.07
North Carolina.....	⁷ 454,976	⁷ 240,446	387,600	232,400	1.17	1.03

¹ The Twelfth Census gives a clear white majority in Louisiana.

² School Laws, 1898, section 94.

³ School Laws, 1897.

⁴ Report of Commissioner of Education, 1898-99, vol. 1, p. lxxxix et seq.

⁵ Does not include permanent improvements.

⁶ 1896-97.

⁷ Excluding certain sums not classified by race, and a few counties not reported.

School expenditure of the sixteen former slave States and the District of Columbia approximately classified by race.¹

Year.	Estimated expenditure for each race.		Estimated school population for each race.		Expenditure per capita of school population.	
	White.	Colored.	White.	Colored.	White.	Colored.
1870-71	\$9,605,158	\$780,306	3,236,639	1,578,170	\$2.97	\$0.49
1874-75	11,297,560	1,723,954	3,547,420	1,794,870	3.18	.96
1878-79	10,123,542	2,050,599	3,900,250	2,042,150	2.60	1.00
1882-83	12,730,938	3,632,533	4,306,000	2,221,930	2.96	1.63
1886-87	16,392,646	4,429,823	4,759,100	2,382,570	3.44	1.86
1890-91	21,245,685	5,444,625	5,230,115	2,551,511	4.06	2.13
1894-95	24,432,222	5,011,362	5,679,755	2,761,205	4.20	1.81
1897-98	24,769,544	6,461,935	5,828,980	2,844,570	4.25	2.27
Total ²	444,769,585	101,860,661				

¹ Report of Commissioner of Education, 1898-99, vol. 1.

² Specimen items are here presented at intervals of five years in order to show the progressive character of these provisions. The total is taken from the full table as prepared by the Bureau of Education.

These tables show that the per capita expense of the education of the negro child is, in the Southern States, at present about one-half of that of the white child. In North Carolina the two are nearly even, being \$1.17 for the white and \$1.03 for the colored, while in Florida the proportion is \$5.92 to \$2.27. The encouraging suggestion of these figures is that the cost of the education of the colored race has been steadily increasing both absolutely and relatively since 1870. In that year the per capita cost of the education of the white child was \$2.97 and of the colored child \$0.49, whereas in 1897 the figures were \$4.25 to \$2.27, respectively. It is but fair to state that part of the disproportion is due to the fact that the schools of the white race represent a higher grade of scholastic attainments and, as is well known, advanced courses are more expensive than the elementary branches.

The State, in so far as it controls education, must, by the very nature and theory of its function, furnish equal accommodations for all of its citizens. The funds are the common property of all the people, and therefore should not be apportioned according to class or race distinction. It is interesting to study the sources of these funds as furnishing light as to their just apportionment between the races.

Sources of public-school funds.

ALABAMA (1898).

Balance	\$42,727.50
Apportionate	407,579.25
White poll tax	107,480.86
Colored poll tax	37,344.77
Total	595,132.38

ARKANSAS (1900).

Amount on hand	\$570,595.20
Common-school fund	446,557.55
District tax	805,412.54
Other sources	19,111.91
Total income	1,841,677.20

DISTRICT OF COLUMBIA.

Congressional appropriation, one-half being chargeable to the District.

FLORIDA (1900).

Cash on hand.....	\$74,608.00
Interest on State fund.....	35,557.00
One-mill apportionment.....	88,892.00
County levies.....	371,539.00
Back taxes.....	68,418.00
Poll taxes.....	36,432.00
Back poll taxes.....	11,396.00
Examination fees.....	1,967.00
Nonresident pupils.....	402.00
School district taxes.....	40,234.00
All other sources.....	24,627.00
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Total income.....	754,072.00
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GEORGIA (1899).

Poll tax.....	\$238,515.00
Direct tax.....	800,000.00
Rent W. and S. R. R.....	210,006.00
Liquor tax.....	142,452.00
Inspection of fertilizers.....	6,173.00
Convict lease.....	24,255.00
Dividend from stock.....	2,046.00
Show tax.....	4,692.00
Oil fees.....	12,503.00
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Total.....	1,440,642.00
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KENTUCKY (1896).

Balance.....	\$44,060.76
Sheriffs' revenue.....	1,161,055.36
Interest on old school bonds.....	79,620.00
Interest on new school bonds.....	36,399.01
Tax on banks.....	275,000.00
Tax on railroads.....	120,000.00
Tax on distilled spirits.....	20,000.00
Tax on miscellaneous corporations.....	25,000.00
Licenses, fines, etc.....	245,000.00
Dividends in banks of Kentucky.....	5,880.00
Miscellaneous.....	30,000.00
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Total.....	2,042,015.13
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MISSISSIPPI (1898-99).

Balance.....	\$142,091.89
State distribution.....	617,780.62
Polls.....	246,365.67
Institute fund.....	8,279.91
Sixteenth section.....	77,712.12
Chickasaw fund.....	47,492.54
Special tax for old warrants.....	164.20
County levy.....	33,937.59
Interest on 3 per cent funds.....	18,352.74
Separate school districts.....	342,589.47
Two and 3 per cent fund.....	3,699.90
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Total income.....	1,538,466.95
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NORTH CAROLINA (1899).

Balance	\$189,681.17
State and county poll tax	303,313.21
General property special tax	433,826.44
Special property local tax	15,781.35
Fines, penalties, etc	14,413.15
Liquor licenses	71,122.36
Auctioneers	1,435.00
State treasury	8,975.36
Other sources	56,275.36
Total	<u>1,059,213.13</u>

SOUTH CAROLINA (1899).

Balance	\$99,131.30
Poll	121,383.72
Three-mill tax	437,310.09
Dispensary	76,672.65
Special levy	93,088.49
Total	<u>827,586.25</u>

TENNESSEE (1899).

Balance	\$633,233.06
From State	157,245.98
From counties	1,407,082.10
From other sources	170,366.21
Total	<u>2,367,927.35</u>

TEXAS (1896-97).

Balance	\$323,879.18
State appropriation, 1895-96	152,904.20
State appropriation, 1898-97	2,977,429.60
Apportionment to towns and cities	307,660.96
Local, county, city, and town taxes	807,600.19
Transfer of pupils	24,897.27
Tuition	41,170.30
Other sources	82,094.66
Total	<u>4,717,636.36</u>

VIRGINIA (1899).

State fund	\$764,282.01
Direct appropriation by legislature	200,000.00
Interest on literary fund	47,532.96
County fund	259,654.44
City fund	392,352.14
Other local funds	55,462.78
District fund	291,339.20
Total	<u>2,010,623.53</u>

These figures of nearly all of the Southern States are sufficient to show the general amounts and sources of school funds.

It has recently been urged that the negro pays only a small percentage of the cost of his own education, while the great burden falls upon the shoulders of the white taxpayer. A study of the sources of the public school funds will throw much light upon the theory sought to be upheld in this assertion. The figures for the State of Georgia are perhaps more easily analyzed than those of any other State. This question was studied by the recent Atlanta conference, with the conclusion that the negro, to a much greater degree than is generally supposed, pays for his own education.

"It was estimated that the negroes of Georgia paid during 1899 \$26,347.43 in

direct tax and \$89,003 in polls, making a total of \$115,530.43 paid directly by the race for educational purposes. The nature of the indirect taxation of Georgia is such that the negro is, without any shadow of question, entitled to his due proportion.

Western and Atlantic Railroad	\$210,000
Liquor tax	142,000
Convict lease	24,255
Dividend from stocks	2,046
Show tax	4,692
Oil tax	12,503

"The negro's pro rata share of the school fund raised by indirect taxation was \$176,898.24, making a grand total of \$292,248.67. The expenditure for negro schools, including proportional cost of superintendence, was \$288,128. This would seem to show that the whites of Georgia, at least, do not contribute one cent to negro education.

"On the same basis of calculation, though with confessed lack of definite data, the conference shows a like condition of things for the entire South. The negro is shown to have contributed in thirty years \$104,539,591 toward public education. This sum, of course, includes his pro rata share of general funds, such as land funds and indirect taxation. The total cost of negro education for the period was \$101,860,601.

"Although these figures are given out as tentative, yet there can be no question as to the substantial correctness of the conclusion that the negro's education imposes no special burden upon the white taxpayers of the South. The wide currency and general acceptance of the assertion is but another illustration of the ease with which frequently reiterated though unsupported statements concerning the negro gain currency and credence."¹

General educational statistics.

State.	School population.		Enrollment.		Number of teachers.		Average salary.		Length of school term.	
	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.
Alabama	351,323	282,733	196,299	122,915	4,773	2,301	\$25.05	\$17.66	168	162
Arkansas	341,492	131,016	230,345	84,317	5,518	1,441	-----	-----	-----	-----
Kentucky	622,554	113,555	391,080	64,246	8,564	1,396	-----	-----	-----	-----
Florida	93,351	68,077	67,077	41,797	2,084	645	36.81	27.67	195	187
Mississippi	-----	-----	162,460	196,829	4,419	3,023	30.49	19.59	-----	-----
North Carolina	403,787	196,600	263,217	127,399	-----	-----	26.32	22.23	214.06	212.82
South Carolina	-----	-----	123,398	146,477	3,000	2,003	-----	-----	36.81	33.63
Tennessee	566,434	193,728	-----	-----	7,347	1,867	-----	-----	-----	-----
Texas	-----	-----	-----	-----	10,468	2,855	48.45	46.86	35.29	34.85
Virginia	397,162	268,703	241,696	117,129	-----	-----	-----	-----	-----	-----

¹ Days.

² Weeks.

³ Months.

This table, while not complete, and the figures not being for the same date for all of the States, nevertheless gives a fair general impression of the prevailing educational treatment which the two races receive. In general, the white schools run longer than the colored, there are more white teachers in proportion to the population, and they receive higher average of salary. These discrepant arrangements range from the most glaring disproportions in some States to an almost exact equivalence in others. In South Carolina there are 3,000 white teachers for 123,398 pupils and 2,003 colored teachers for 146,477 negro pupils. The length of school term for the whites is 6.81 months and for the blacks only 3.65 months.

¹ Dr. W. E. B. DuBois, Independent, July 18, 1901.

Although the blacks constitute three-fifths of the population, their educational allowance absorbs scarce more than one-fourth the total school fund. In Florida the whites have 2,084 teachers for 68,077 pupils, while the blacks are allowed only 645 teachers for 41,797 pupils. The relative compensation for teachers is \$36.81 and \$27.67 per month, and the relative lengths of school terms ninety-five and eighty-seven days. On the other hand, in North Carolina, if we make the necessary allowance for the inevitable differences in the scholastic requirements of the two races, the provisions both as to length of term and compensation of teachers seem to be equitable enough. In Texas, whose school laws require equal facilities for the two races, the provisions are entirely beyond complaint, whether we consider the relative number of teachers employed, their compensation, or the length of school term. While the whites are a fraction ahead, yet this difference can be accounted for on other grounds than race discrimination. The white teachers average \$48.45 per month, while the colored teachers average \$46.86. This difference is doubtless due to the higher-grade certificates held by white teachers. The average term for white schools is 5.39 months; for colored, 4.85. This slight discrepancy may be effected by the relative distribution and density of the two elements of the population.

On the whole, it appears that while the negro constitutes one-third of the population of the original slave States, the cost of his education is not more than one-fifth the total allowance—that is, the educational provision of a colored child costs just half as much as that for a white child.

IV. NEGRO OWNERS AND TENANTS OF FARMS AND HOMES.

The census of 1890 contains a vast deal of valuable information concerning the negro race, a careful study of which throws much light upon current educational discussion. The negro problem is ever discussed, but seldom studied. In no other field of serious inquiry do we find such an extravagance of assertion coupled with such paucity of proof. We are expected to accept, without investigation, statements and solutions born of impatience and haste, although they clearly violate easily accessible and accurate data.

The assertion that the whites gratuitously impose a tax upon themselves to defray the cost of negro education has gained such wide currency and credence as to become almost a universally accepted belief. Indeed, it is postulated as an axiom in current discussions. But the potency of fact must in the end overcome the fascination of assertion. It is, however, a slow and painful process to uproot popular prejudice by scientific demonstration. A full and fair presentation of the negro as a contributing factor to the industrial and economic life of the South will be sufficient proof that his educational privileges are not bestowed as a charity, but are a legitimate part of the fruits of his own endeavor.

Interesting as such inquiry might be, it is not the purpose of this investigation to discuss the theory and function of public education, except in so far as its bearing upon the present task makes it imperative.

The public-school system is the most democratic feature of our democratic institutions. The obvious object is to produce a higher average of intelligence and good citizenship. It is undertaken and controlled by the State for the general welfare. The rich and the poor meet together on terms of perfect equality, and the State administers facilities impartially, alike to all. The taxpaying ability of the recipient is no more a legitimate factor in popular education than it is in the enforcement of law or the administration of justice. The childless millionaire is taxed to educate the progeny of the prolific peasant with as much justice and equity as when a tax is imposed upon the exemplary citizen to restrain the vicious and the lawless.

The injection of the negro usually forms a perturbing element in the sociological equation. The social formulas which pass unchallenged among white men lose

much of their force and effect when made to include the negro. This race was injected without warning or preparation, into the general body politic, and has ever since formed a disturbing and irritating factor. At the close of the war the negro, as might well be imagined, figured scarcely at all in the roll of taxpayers. When, therefore, public schools were inaugurated in the South carrying like provisions for both races it might have appeared, on first view, that the whites were being taxed for the education of the blacks. How prone men are to be satisfied with appearances without stopping to investigate the underlying principles. It is a dictum of political economy that labor pays every tax in the world. The negro did not, indeed, enjoy the privilege of passing the tribute to the tax taker, for the accumulated fruits of his labor were in the possession of another race.

But does this justly preclude him from sharing in all the public privileges which the fruits of his labor make possible? Every laborer contributes his full share and more than his share toward bearing the public burden; and even if he did not, motives of self-preservation would induce the State to abate no whit in its effort toward popular enlightenment. The argument that the rich are taxed for the education of the poor is seldom heard of outside of communities complicated with the race question. Who would have the temerity to suggest such an argument in New York or Minnesota?

A knowledge of the extent to which the negro has acquired property, upon which he pays taxes directly, or hires it, in which case he certainly meets the taxation item indirectly, will do much to correct an erroneous impression.

White and colored population of the sixteen original slave States, 1890.¹

State.	White.	Colored.	Per cent.	
			White.	Colored.
Alabama	833,718	678,489	55.10	44.84
Arkansas	818,752	303,117	72.57	27.40
Delaware	140,066	23,386	83.13	6.85
District of Columbia	154,695	75,573	67.14	32.80
Florida	224,949	166,180	57.47	42.46
Georgia	978,357	858,815	53.25	46.74
Kentucky	1,590,462	268,071	85.57	14.42
Louisiana	558,395	559,193	49.92	49.99
Maryland	826,493	215,657	79.29	20.69
Mississippi	544,851	742,559	42.25	57.58
Missouri	2,528,458	150,184	94.37	5.06
North Carolina	1,055,382	561,018	65.25	34.67
South Carolina	462,008	688,634	40.13	59.85
Tennessee	1,336,637	430,678	75.62	24.37
Texas	1,745,985	488,171	78.10	21.84
Virginia	1,020,122	635,438	61.60	38.37
West Virginia	730,077	32,690	95.71	4.29
Total	15,549,357	6,888,152	69.31	30.69

This table shows the number of whites and blacks in the slave States in 1890 and their respective percentage as a factor of the total population. As this study is concerned primarily with the negro and with the whites mainly as a concomitant factor, only persons of African descent are tabulated wherever it is possible to separate them from the Indian and Mongolian races. In the report of the Eleventh Census, Indians, Chinese, and Japanese are classed with negroes as constituting the colored element; but since the aborigines and the orientals constitute no part of the negro's educational problem, they are therefore justly excluded from the present consideration. The comparatively slight numbers of such non-Aryans do not, in general, produce any appreciable effect upon the racial equation between Africans and Europeans; but in Louisiana, where the two elements are almost equal, they constituted in 1890 the balance of population. There were 558,395 whites, 559,193 blacks, 233 Chinese, 39 Japanese, and 627 Indians. Thus the 999

¹ Omitting Chinese, Japanese, and Indians.

Mongolians and Indians were sufficient to change a negro plurality into an absolute minority.

The negroes were in the majority in two of these States, and if we consider the competing races only there would be three States in which this race predominated numerically. The per cent of the negro element ranged from 59.85 in South Carolina to 4.29 in West Virginia. In the entire region there were 15,549,357 whites and 6,888,152 colored, the negro element averaging 30.69 per cent. If we omit Missouri and West Virginia, where the African element did not exceed 5 per cent, the negroes constituted 35 per cent of the remaining fourteen States. This territory, with its mixed population, constitutes America's most serious educational problem. It is interesting to study the extent to which the negro has gained material proprietorship since emancipation. Let us not forget that he began at the zero point of materiality. He was emancipated without so much as one day's provision. Being cast upon the cruel current of material rivalry, without experience or intelligent self-direction, he has had to drift blindly in the dark, without compass or pilot. His material accumulations, therefore, should not be judged in the light of their absolute value, without regard to the disadvantageous circumstances under which they were acquired. We may regard his present ownership as an earnest of future acquisitions.

Number of persons owning and hiring farms and homes in the sixteen slave States and the District of Columbia, 1890.

State.	Owners.		Tenants.		Aggregate.	
	White.	Colored.	White.	Colored.	White.	Colored.
Alabama	83,774	15,736	71,119	116,575	154,893	132,311
Arkansas	89,311	11,844	67,796	44,602	157,107	56,446
Delaware	11,869	1,264	17,491	3,929	29,560	5,193
District of Columbia	9,093	2,132	20,522	12,167	29,615	14,299
Florida	29,479	10,649	17,179	22,676	46,658	33,325
Georgia	90,629	20,005	96,295	145,032	186,924	165,137
Kentucky	163,318	12,877	141,804	36,441	305,122	49,318
Louisiana	48,660	14,602	57,802	92,768	106,462	107,370
Maryland	68,619	8,596	94,541	30,291	163,160	38,887
Mississippi	61,500	16,956	39,929	122,285	101,429	139,241
Missouri	264,674	8,894	233,815	20,677	498,489	29,671
North Carolina	118,211	20,010	85,474	82,875	203,685	102,885
South Carolina	42,932	21,101	44,314	114,450	87,296	135,541
Tennessee	135,712	14,663	120,218	63,532	255,930	78,195
Texas	168,982	20,880	156,084	64,961	325,066	85,841
Virginia	100,212	29,888	91,971	82,516	192,183	112,404
West Virginia	77,898	1,471	56,796	4,184	134,694	5,655
Total	1,565,923	231,568	1,413,150	1,059,991	3,763,073	1,291,919

Percentage of population owning and hiring farms and homes, by race, 1890.

State.	Owners.		Tenants.		Aggregate.	
	White.	Colored.	White.	Colored.	White.	Colored.
Alabama	10.05	2.32	8.53	17.18	18.58	19.50
Arkansas	10.91	3.93	8.23	14.43	19.19	18.26
Delaware	8.47	4.45	12.49	13.84	20.96	18.39
District of Columbia	5.88	2.82	13.27	16.10	19.15	18.62
Florida	13.13	6.41	7.64	13.65	20.74	20.06
Georgia	9.26	2.33	9.84	16.89	19.13	19.22
Kentucky	10.27	4.80	8.92	13.59	19.19	18.39
Louisiana	8.71	2.61	10.35	16.05	19.06	19.20
Maryland	8.30	3.99	11.44	14.05	19.74	18.04
Mississippi	11.29	2.28	7.33	16.47	18.62	18.75
Missouri	10.47	5.92	9.25	13.77	19.72	19.69
North Carolina	11.21	3.67	8.16	14.77	19.31	18.34
South Carolina	9.30	5.06	9.59	16.61	18.89	19.67
Tennessee	10.15	3.40	8.99	14.75	19.14	18.15
Texas	9.68	4.28	8.94	13.39	18.52	17.59
Virginia	9.82	4.70	9.02	12.99	18.84	17.69
West Virginia	10.67	4.50	7.78	12.80	18.45	17.30

The foregoing tables contain the number of persons owning and hiring their farms and homes, by race, compiled from the Eleventh Census, for the sixteen original slave States and the District of Columbia. There were 231,568 negroes who owned their farms and homes, against 1,565,923 whites. The contributing power of the whites to the ownership of farms and homes was 10.07 per cent of the white population, against 3.23 per cent for the negroes. If we estimate 5 persons to the family, it will be seen that 50 per cent of the white families owned their farms and homes, and 16 per cent of the colored families. It would probably be a revelation to most persons who decry the lack of energy, thrift, and foresight on the part of the negro race to be told that one-sixth of them own their own farms and homes. There were 29,888 negro owners in Virginia alone. This State contained, in round numbers, 100,000 white and 30,000 negro owners of farms and homes, representing 9.82 and 4.70 per cent of the respective populations; or, to put it in other terms, 23 out of every 100 negro families were their own proprietors, against 49 out of every 100 whites. The highest average contributing power to the ownership of farms and homes on the part of the negro is found in Florida, where 32 negro families out of every 100 are their own proprietors, and the lowest in Alabama, which contributes only 11 out of 100.

It will be seen that one-sixth of the colored people of the South are taxpayers upon their own property. We must not forget also that capitation tax prevails in most or all of the Southern States, so that every negro male over 21 years of age becomes a taxpayer. These two classes contribute directly to the public revenues.

The table under consideration also contains the number of persons who hire their farms and homes. The number of blacks is in relative excess of the whites. There were 1,413,150 whites and 1,059,991 colored tenants. These might be called indirect taxpayers; for it is well known that the owner of a farm or home estimates the taxation as an essential element of cost in fixing the rental. So that whether the tenant pays in money, service, or part of crop he is the real taxpayer upon the house which he occupies or the farm which he tills. The percentage of the colored race who are owners and tenants, and therefore taxpayers, directly or indirectly, is not so far below that of the whites; or, to be exact, 19 per cent of the one against 24 per cent of the other.

It is doubtless true that the absolute values of the colored holdings are rather small by comparison. This is inevitable. The negro out of his scanty earnings acquires a small piece of land or humble shanty which he can call his own. But this does not alter the fact that a large number of the race have become owners of the farms and homes which they occupy, and that their property is subject to all the requirements of public revenue. The essential fact to be borne in mind is that nearly a quarter-million negroes in thirty years have risen from the condition of chattels to that of proprietorship. The race which a generation ago was rated with farms and homes as a part of the common asset now represents 13 per cent of the ownership of all the homes and farms in the South.

Nor do the figures reveal the whole truth. It is quite easy to take for granted that all white and negro tenancy implies white proprietorship; but, as a matter of fact, many negroes, and white persons as well, are tenants of farms and homes that are owned by members of the colored race. The census of course does not take cognizance of such cases, which, if revealed, would doubtless bring the total negro holdings to a much higher figure.

Owners of farms and homes, separately, in the former slave States and District of Columbia, 1890.

State.	Owners of farms.					
	Free.		Incumbered.		Total.	
	White.	Colored.	White.	Colored.	White.	Colored.
Alabama	60,746	8,045	2,327	802	63,073	8,847
Arkansas	68,629	7,319	2,629	685	71,258	8,004
Delaware	3,151	199	1,906	89	4,457	288
District of Columbia	217	15	9	1	226	16
Georgia	63,408	7,706	2,065	423	65,473	18,131
Florida	18,423	4,746	503	200	18,926	4,940
Kentucky	114,209	3,870	4,751	240	118,960	4,310
Maryland	16,484	1,691	7,335	459	23,819	2,150
Mississippi	45,941	10,032	3,173	1,494	49,119	11,526
Missouri	108,130	1,812	62,077	933	170,207	2,745
North Carolina	91,333	9,670	4,377	824	95,770	10,494
South Carolina	29,531	12,048	2,590	1,027	32,121	13,075
Tennessee	97,394	5,951	3,002	427	100,396	6,378
Texas	107,569	11,505	6,213	1,008	113,782	12,513
Virginia	69,527	13,097	2,014	581	68,541	13,678
West Virginia	48,327	436	7,219	53	55,546	489
Louisiana	27,757	6,257	997	428	28,749	6,685
Total	967,836	104,393	112,587	9,677	1,080,423	114,290

State.	Owners of homes.					
	Free.		Incumbered.		Total.	
	White.	Colored.	White.	Colored.	White.	Colored.
Alabama	20,103	6,656	593	233	20,701	6,889
Arkansas	17,031	3,583	1,022	257	18,053	3,840
Delaware	4,548	595	2,864	381	7,412	976
District of Columbia	6,595	1,731	2,272	365	8,867	2,116
Georgia	24,301	11,518	376	376	25,156	11,874
Florida	10,021	5,489	532	220	10,553	5,709
Kentucky	41,272	8,237	3,076	530	44,353	8,867
Maryland	32,875	5,239	11,925	1,207	44,800	6,446
Mississippi	11,869	5,117	512	253	12,381	5,430
Missouri	67,775	4,747	26,692	1,402	94,467	6,149
North Carolina	21,333	9,052	1,103	464	22,441	9,516
South Carolina	10,484	7,589	777	437	10,861	8,026
Tennessee	33,538	7,675	1,178	610	35,316	8,285
Texas	55,836	8,018	2,364	349	58,200	8,367
Virginia	30,411	15,524	1,260	686	31,671	6,210
West Virginia	18,169	746	4,183	236	22,352	1,082
Louisiana	19,131	7,625	780	292	19,911	7,907
Total	425,102	109,161	72,788	8,297	484,500	117,689

This table shows that the negro owned 104,393 unincumbered farms and 9,677 incumbered ones. It is easy to assume that the property which is recorded in the negro's name is only nominally his, whereas the real owner is the white man who holds the mortgage. Of the 230,000 negro owners of homes and farms, less than 18,000 carry mortgages. It might appear that the comparatively small number of pieces of involved property held by the negro implies that he is not rapidly increasing his holdings. Those who are acquainted with his financial methods know that he is in the habit of secreting his savings until he has sufficient accumulations to make a purchase outright. An old, unobtrusive colored man often surprises his friends and neighbors by a sudden show of financial strength who had previously been regarded as impecunious.

NEGRO PROPERTY OWNERS IN GEORGIA, VIRGINIA, AND NORTH CAROLINA.

A most interesting bulletin has just been issued by the Bureau of Labor on Negro Landholders in Georgia.¹ Georgia contains a larger black contingent than any other State. The negro element amounts to more than 1,000,000, comprising 46

¹ Bulletin No. 35, July, 1901; Dr. W. E. B. DuBois, investigator.

per cent of the entire population. Record of the ownership of property by negroes in this State has been kept since 1874.

The assessed value of total property owned by negroes in Georgia, 1874 to 1900.

Year.	Assessed value.	Year.	Assessed value.
1874	\$6,157,798	1888	\$9,631,271
1875	5,393,885	1889	10,415,330
1876	5,488,867	1890	12,322,003
1877	5,430,844	1891	14,196,735
1878	5,124,875	1892	14,869,575
1879	5,182,398	1893	14,960,675
1880	5,764,293	1894	14,387,730
1881	6,478,951	1895	12,941,230
1882	6,589,876	1896	13,292,816
1883	7,582,395	1897	13,619,690
1884	8,021,525	1898	13,719,200
1885	8,153,390	1899	13,447,423
1886	8,655,298	1900	14,118,720
1887	8,936,479		

This table shows a gradual, healthy, general increase, which is not free from the fluctuations caused by the ebb and flow of the tide of general business conditions throughout the country.

Number of acres and assessed valuation of land owned by negroes in Georgia, 1874 to 1900.

Year.	Number of acres.	Assessed valuation.	Year.	Number of acres.	Assessed valuation.
1874	338,769	.....	1888	868,501	\$2,822,943
1875	396,653	\$1,263,902	1889	877,112	3,047,685
1876	457,635	1,234,104	1890	967,234	3,425,176
1877	458,989	1,262,723	1891	1,004,306	3,914,143
1878	501,890	1,294,383	1892	1,063,649	4,477,183
1879	541,199	1,348,758	1893	1,043,860	4,450,121
1880	586,664	1,522,173	1894	1,064,431	4,836,366
1881	660,358	1,754,800	1895	1,038,824	4,158,960
1882	692,355	1,877,861	1896	1,043,847	4,234,848
1883	666,583	2,065,938	1897	1,057,567	4,553,738
1884	756,793	2,262,185	1898	1,097,087	4,340,100
1885	788,376	2,362,889	1899	1,062,223	4,220,120
1886	802,939	2,568,198	1900	1,075,073	4,374,549
1887	813,725	2,598,650			

The average size of negro farms in 56 typical counties was 79 acres. These counties contained 8,065 negro farm owners, or a majority for the entire State. The average size of all farms in Georgia was 147 acres. The average value of negro farms for typical counties was \$212. The value of town and city real estate owned by Georgia negroes was \$3,642,586, or more than 29 per cent of all negro property in the State. Savannah showed \$870,707, Atlanta, \$793,910, and Augusta, \$479,495 as held by negroes in the respective municipalities.

Landholders in Virginia.

Year.	Number of acres.		Assessed valuation per acre.	
	White.	Negro.	White.	Negro.
1891	25,285,981	698,074	\$4.88	\$4.21
1895	25,154,781	833,147	4.50	4.14

Assessed value of property held by negroes in Virginia, 1891 to 1895.

Year.	Real estate.	Personal property.	Total.
1891.....	\$8,935,514	\$3,094,451	\$12,089,965
1892.....	9,425,085	3,342,950	12,708,035
1893.....	9,829,583	3,465,370	13,294,953
1894.....	10,162,889	3,241,144	13,414,033
1895.....	10,759,548	3,174,450	13,933,998

In North Carolina the negroes in 1891 paid taxes on \$8,018,446 worth of property.

Valuation of taxable property owned by whites and negroes in Georgia, North Carolina, and Virginia.

State.	Year.	White.	Colored.
Georgia.....	1890	\$365,044,781	\$12,322,003
North Carolina.....	1891	234,109,565	8,018,446
Virginia.....	1890	379,708,644	12,089,965
Total.....		978,862,993	32,430,414

Percentage of total property and per capita valuation for each race.

State.	Percentage.		Per capita valuation.	
	White.	Colored.	White.	Colored.
Georgia.....	96.5	3.5	\$322.3	\$14.3
North Carolina.....	96.7	3.3	223.1	14.1
Virginia.....	96.9	3.1	374.2	18.9
Total.....	96.8	3.2	323.3	15.7

These tables show the general economic condition of the two races in the three States mentioned. The relative values are so close together in these States that we may well take them as typical of the whole group. It would be misleading, however, to suppose that these figures reveal the whole truth. The negro's possessions are limited to real estate and personal property. The vast corporate interests, public and private, are set down wholly to the credit of the white race. As is well known, these comprise a large part of the aggregate wealth of the several States. The real ownership is not always, perhaps not generally, in the hands of local whites, but is the result of outside capital invested in the State. For purposes of taxation, therefore, they can not justly be credited to the white race, for as is well known the burden of taxation falls upon the patrons rather than upon the ownership of such enterprises.

V. OCCUPATIONS OF NEGROES.

Mr. Henry Gannett, of the United States Geological Survey, has prepared an interesting pamphlet on occupations of negroes, under the auspices of the trustees of the John F. Slater fund.¹ From this pamphlet we learn that out of a total population of 62,622,250 in the United States, 22,753,884 persons, or 34.6 per cent, were engaged in gainful occupations. Of negroes, numbering 7,470,040, there were 3,073,123, or 41.1 per cent, engaged in gainful occupations. Thus for the country at large, the negroes were more generally employed than the whites. The South

¹ Trustees of John F. Slater fund, Occasional Papers, No. 6.

boasts of her bygone days of chivalric civilization instinct with dignity, comity, and grace; and she does well. The New South, springing Phoenixlike from the ashes of the old, is fast bidding for industrial prestige and power. But underneath all her glory—past, present, or to come—lies the negro's brawny arm. It was he who cleared her forests, cultivated her fields, and covered her hills with the fleecy snow of cotton and her valleys with golden shocks of corn. The brunt of effort necessary to the new awakening will also devolve upon him the veritable "man with the hoe." In order to show to what extent the negro is a contributing factor to the industrial life of the South, the following tables have been computed on the basis of the Eleventh Census.

Persons engaged in gainful occupations, by race, 1890.

States.	White.	Colored.	Per cent.	
			White.	Colored.
Alabama	247,993	293,406	29.63	43.24
Arkansas	230,102	116,976	28.10	37.84
Delaware	51,897	12,350	.....	.....
District of Columbia	61,015	40,007	.....	52.94
Florida	71,269	65,371	39.44	39.34
Georgia	299,330	369,265	30.60	43.00
Kentucky	482,602	107,666	30.34	40.16
Louisiana	179,324	243,157	32.11	43.43
Maryland	297,227	95,811	35.96	44.43
Mississippi	157,955	303,837	28.99	40.92
Missouri	823,285	60,655	32.56	40.39
North Carolina	320,277	216,590	30.35	38.61
South Carolina	151,197	289,550	32.73	42.63
Tennessee	387,896	165,734	29.02	38.48
Texas	525,393	170,085	30.00	34.84
Virginia	310,487	241,095	30.44	37.94
West Virginia	209,669	14,101	28.99	43.14
Total	4,806,918	2,805,656	30.09	40.70

The first table shows the number of persons engaged in gainful occupations, by race, for the sixteen original slave States and the District of Columbia. According to the plan of the Eleventh Census, persons engaged in gainful occupations did not include housewives and school children, but only those persons above 10 years of age who received a definite stipend for their labor. There were 4,826,918 whites and 2,815,656 negroes engaged in gainful pursuits. While the negroes constituted 30 per cent of the population, they contributed 37 per cent of the workers. Every State shows a higher percentage of negroes than of whites engaged in gainful occupations. The per cent for negroes ranged from 52.94 in the District of Columbia to 34.84 in Texas, while that of the whites varied from 39.44 in the District of Columbia to 28.10 in Arkansas. If we omit the city-State of the District of Columbia, because of its peculiar industrial conditions, the highest per cent of employment of both races is found in the State of Maryland, viz, 35.96 for whites, and 44.42 for blacks. This is due to the city of Baltimore, which contains half the population of the State. The employment of the whites in the South was far below that of the whites in the country at large, while the Southern negro shows a percentage slightly below the average for his race.

Proportions engaged in gainful occupations.¹

Class.	Per cent.	Class.	Per cent.
Total population	34.6	Negroes	41.10
Whites	35.5	Southern whites	30.93
Native whites	31.6	Southern negroes	40.70
Foreign-born whites	55.2		

¹ This table, except for Southern whites and Southern negroes, is taken from Occupations of Negroes, p. 6.

The high employment rate of the foreign whites is due, of course, to the large proportion of adults among them, who come to this country with an eye single to gainful work. Omitting this class, the negro has a higher rate than any other element, and the Southern whites have the lowest rate of all. In Alabama, Georgia, Louisiana, Mississippi, and South Carolina there was an army of 1,500,000 black toilers, constituting, approximately, three-fifths of the labor force of these States. If we assume equality among the laboring units, the negro is seen to contribute 60 per cent of the industrial strength of the cluster of States in which the race is most numerous. Throughout the slave territory there were 414 negroes engaged out of every 1,000 of the negro population, against 309 whites to the 1,000, giving an excess of 105 in favor of the negroes.

Selected occupations, by race, for the sixteen former slave States, 1890.

State.	Agriculture, fisheries, and mining.		Domestic and personal service.		Manufacturing and mechanical industries.	
	White.	Colored.	White.	Colored.	White.	Colored.
Alabama	168,258	212,485	14,582	58,819	28,152	10,856
Arkansas	109,013	87,290	14,588	21,733	18,241	3,679
Delaware	14,510	4,192	9,677	6,509	17,236	868
District of Columbia	1,317	568	10,213	23,421	18,983	4,324
Florida	34,861	31,318	8,205	23,655	12,883	5,251
Georgia	191,525	226,570	16,455	104,330	40,465	18,523
Kentucky	286,610	39,464	46,658	51,577	75,321	7,351
Louisiana	79,192	161,244	26,912	62,911	30,418	11,223
Maryland	75,137	30,257	50,654	51,431	96,485	5,527
Mississippi	113,358	245,921	6,745	42,939	13,110	6,487
Missouri	388,572	16,079	112,390	34,517	148,979	3,920
North Carolina	233,648	140,287	19,225	51,986	36,168	14,465
South Carolina	104,483	223,496	6,956	44,775	18,931	12,188
Tennessee	252,023	84,824	29,321	55,960	46,605	11,546
Texas	325,563	106,587	51,953	48,202	51,806	6,249
Virginia	167,751	103,913	30,767	95,383	54,236	23,326
West Virginia	125,047	4,840	25,431	5,977	29,875	967
Total	2,730,868	1,719,335	480,732	790,125	737,894	146,740

State.	Trade and transportation.		Professional service.	
	White.	Colored.	White.	Colored.
Alabama	27,011	9,285	9,990	1,961
Arkansas	19,045	2,811	9,215	1,463
Delaware	8,393	652	2,081	129
District of Columbia	23,921	4,969	6,581	725
Florida	10,807	4,158	4,450	999
Georgia	37,997	16,764	12,888	3,078
Kentucky	53,696	7,448	20,313	1,826
Louisiana	34,385	6,173	8,417	1,606
Maryland	61,291	7,682	13,660	914
Mississippi	16,629	5,745	8,113	2,745
Missouri	135,119	4,905	38,225	1,234
North Carolina	21,130	7,668	10,106	2,184
South Carolina	14,684	7,043	6,143	2,048
Tennessee	42,828	11,076	17,119	2,328
Texas	70,548	6,452	25,523	2,595
Virginia	42,610	15,907	15,123	2,566
West Virginia	20,884	2,088	8,432	229
Total	641,978	128,828	46,379	28,630

The second table shows selected occupations, by race, for the 16 original slave States and the District of Columbia. The Eleventh Census divided occupations into 5 classes: (1) Agriculture, including mining and fisheries; (2) personal and domestic service; (3) manufacturing and mechanical industries; (4) trade and transportation; (5) professional service. The census order has not been adhered to, but the several occupations have been arranged in the order of the number of colored persons employed. It may be taken for granted that the vast bulk of

persons enumerated under the first head are engaged in vegetal agriculture, as mining and fishing are comparatively unimportant industries in the South.

The negroes were engaged mainly in agriculture and domestic service, the number in manufacturing and trade being quite small in comparison, while the number in the professions was quite insignificant. Of those listed in the professions, the majority are school-teachers and ministers, leaving comparatively few for law and medicine.

The following table shows the proportion of negro wage earners engaged in the several groups of occupations, together with those for the native and foreign-born whites for the United States:

Occupations.	Native whites.	Foreign-born whites.	Negroes.
	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
Professions	5.50	2.2	1.1
Agriculture	41	25.5	57.2
Trade and transportation	17	14	4.7
Manufactures	22.90	31.3	5.6
Personal service	13.60	27	31.4
Total	100	100	100

It is disclosed that 57.2 per cent of negro wage earners, 41 per cent of native white, and 25.5 per cent of foreign-born white wage earners are engaged in agriculture. The negro is represented in the professions by 1.1 per cent of those engaged, or less than 1 professional representative for every 100 of the population, whereas the native whites have more than 1 in 50. In manufactures, trade, and transportation the negro shows only 10 per cent, against 40 per cent for the native whites and 45 per cent for foreign whites. It is also known that the negroes who are engaged in such pursuits are in many cases performing the drudgery of unskilled labor. This is not on account of inability or lack of desire for the higher lines of mechanical skill, but because they are excluded by intolerant regulations. Herein lies the great field for remunerative labor, and the negro, through no fault of his own, is excluded therefrom and relegated to the less desirable spheres of farm life and domestic service.

Principal occupations pursued by negroes, 1890.

State.	All occupations.	Agriculture, fisheries, and mining.	Domestic service.	Other occupations.
Alabama	298,406	212,485	58,819	22,102
Arkansas	116,976	87,290	21,733	7,953
Delaware	12,340	4,192	6,509	1,639
District of Columbia	40,007	568	29,421	10,018
Florida	65,371	31,318	23,655	10,398
Georgia	369,205	220,370	104,390	58,365
Kentucky	107,066	39,464	51,577	16,525
Louisiana	243,157	161,244	62,911	19,002
Maryland	95,811	30,257	51,431	14,123
Mississippi	303,837	245,921	42,939	14,977
Missouri	60,655	16,079	34,517	10,059
North Carolina	276,590	140,287	51,986	24,317
South Carolina	289,550	229,496	48,775	21,279
Tennessee	165,734	84,824	55,960	24,950
Texas	170,085	106,587	48,202	15,296
Virginia	241,095	103,913	95,383	41,799
West Virginia	14,101	4,840	5,977	3,284
Total	2,905,640	1,719,335	790,125	386,181

This table shows the principal occupations pursued by negroes in the South. It is seen, as before suggested, that they are chiefly employed in agriculture and in

domestic service, those engaged in all other callings not exceeding 14 per cent of the wage earners:

Persons engaged in agriculture, including mining and fisheries.

State.	Whites.	Negroes.
Alabama	168,258	212,485
Georgia	191,525	226,570
Louisiana	79,192	161,244
Mississippi	113,358	245,921
South Carolina	104,483	223,496
Total	656,816	1,069,716

In the five States where the negro population is most numerous there were 1,069,716 negroes engaged in agriculture to 656,816 whites. The negro represented five-eighths of the agricultural workers in these States. In Louisiana, Mississippi, and South Carolina there were more than two negroes engaged in agriculture to one white person.

The small proportion of negroes engaged in agriculture in the border States forces itself upon attention.

Occupation of negroes in the border States.

State.	Agriculture.	Domestic service.	Other pursuits.
Delaware	4,192	6,509	1,644
Kentucky	39,464	51,577	16,525
Maryland	20,257	51,431	14,123
Missouri	16,079	34,517	19,059
West Virginia	4,840	5,977	3,284

Occupations of negroes in the far Southern States.

State.	Agriculture.	Domestic service.	Other pursuits.
Alabama	212,485	58,819	22,102
Georgia	226,570	104,330	38,365
Louisiana	161,244	62,911	19,002
Mississippi	245,421	42,939	14,977
South Carolina	223,496	44,775	21,279

In the border States more than half of the negroes are engaged in domestic service and about one-third in agriculture. In the far Southern States, on the other hand, five-sevenths of the population is engaged in agriculture and one-fifth in personal service.

This fact is not without sociological significance. It bears out the suggestion in section 1, that the border State negroes do not find a comfortable social status among their white neighbors, and they therefore leave the rural districts for the cities, where the social conditions are more to their liking. It is little less than striking that in an agricultural State like Missouri there should be only 16,000 negroes engaged in agriculture, against more than twice that number in personal service. The proximity of large cities has much to do with the distribution of the negroes among the several occupations, but they are not of themselves sufficient to account for the pronounced tendency of the border States.

These figures give rise to two pregnant suggestions:

(1) The education of the negro, in so far as its aims and intent are of a practical character, should take cognizance of the occupations which the bulk of the children must follow. If 85 per cent of this race are pursuing two main lines of

employment, it would be the utmost folly to ignore this fact in a scheme of education. Industrial education for the negroes should, in the main, be directed to those lines from which the recipient is most likely to derive a livelihood.

(2) The proportion of negroes in these callings is too large, and diversification of activities should be encouraged. It is doubtless true, however, that the segregation of the blacks in agricultural and domestic pursuits is the result of natural industrial forces. It is here that competition is least severe, and he is shielded from the fierce strife of Aryan rivalry. These are, indeed, the only fields that are open to him on anything like an adequate scale. The destiny of the race must be worked out in the rural districts of the South, and the bulwark and buttress of its strength is in the soil. It is here that remedial and educational agencies can be most wisely applied.

Occupations of whites, by sex, 1890.

State.	Agriculture, fish- eries, and mining.		Domestic and per- sonal service.		Manufacturing and mechanical industries.	
	Males.	Females.	Males.	Females.	Males.	Females.
Alabama	153,428	14,830	9,355	5,227	22,424	5,728
Arkansas	160,172	8,841	9,480	5,108	16,297	1,994
Delaware	14,238	272	6,646	3,031	14,578	2,658
District of Columbia	1,275	42	6,376	3,837	15,590	3,393
Florida	32,710	2,151	6,110	2,095	11,139	1,744
Georgia	175,073	16,453	10,037	6,418	30,223	10,242
Kentucky	275,745	10,865	23,287	17,369	60,170	15,151
Louisiana	73,191	6,001	19,368	7,544	23,662	6,756
Maryland	73,151	1,986	33,243	17,411	73,556	22,929
Mississippi	102,097	11,261	4,225	2,520	10,628	2,482
Missouri	376,474	12,098	71,726	40,664	124,719	24,260
North Carolina	211,842	21,806	8,471	10,754	25,106	11,062
South Carolina	89,627	14,856	3,751	3,205	12,663	6,268
Tennessee	240,718	11,305	17,807	11,514	39,085	7,520
Texas	312,157	13,406	39,609	12,344	45,352	6,454
Virginia	161,190	6,561	19,044	11,723	44,401	9,835
West Virginia	121,841	3,206	15,895	9,536	26,490	3,415
Total	2,574,929	155,739	309,430	170,360	671,254	141,891

State.	Trade and transportation.		Professional service.	
	Males.	Females.	Males.	Females.
Alabama	26,234	777	7,708	2,232
Arkansas	18,584	461	7,538	1,677
Delaware	7,697	696	1,405	676
District of Columbia	19,123	4,798	5,297	1,284
Florida	10,516	354	3,467	983
Georgia	36,648	1,349	9,782	3,106
Kentucky	50,556	3,140	14,724	5,595
Louisiana	32,418	1,967	5,944	2,473
Maryland	55,689	5,602	9,502	4,153
Mississippi	16,103	526	5,613	2,500
Missouri	127,199	7,920	27,061	11,164
North Carolina	20,606	534	7,346	2,760
South Carolina	14,156	538	4,426	1,717
Tennessee	41,169	1,659	13,244	3,875
Texas	68,790	1,758	20,191	5,532
Virginia	40,976	1,634	10,307	4,816
West Virginia	20,157	727	6,230	2,202
Total	606,622	33,420	159,885	56,600

Occupations of negroes, by sex, 1890.

State	Agriculture, fish- eries, and mining.		Domestic and per- sonal service.		Manufacturing and mechanical industries.	
	Males.	Females.	Males.	Females.	Males.	Females.
Alabama	146,361	66,124	25,428	33,391	9,926	930
Arkansas	68,219	19,071	11,227	10,506	3,406	273
Delaware	4,157	32	3,631	2,878	816	52
District of Columbia	553	15	12,682	16,739	2,838	1,486
Florida	23,602	7,626	13,231	10,424	4,496	745
Georgia	172,500	54,070	39,297	65,063	16,604	1,919
Kentucky	38,456	1,008	26,649	28,928	6,522	829
Louisiana	111,820	49,424	31,613	31,298	8,456	2,767
Maryland	29,516	741	21,022	30,469	4,456	1,071
Mississippi	167,997	77,924	17,210	25,729	5,694	793
Missouri	15,757	322	18,899	15,618	3,531	389
North Carolina	106,493	33,794	20,584	31,402	12,113	2,352
South Carolina	149,915	73,581	18,555	26,220	9,850	2,338
Tennessee	72,316	12,508	25,624	30,336	10,407	1,129
Texas	85,824	20,763	23,361	24,841	5,799	450
Virginia	93,746	10,167	39,454	55,949	18,852	4,474
West Virginia	4,790	50	3,516	2,461	927	40
Total	1,292,112	427,220	347,960	432,062	123,793	22,047

State.	Trade and transportation.		Professional service.	
	Males.	Females.	Males.	Females.
Alabama	9,151	134	1,471	490
Arkansas	2,787	24	1,225	238
Delaware	634	18	97	62
District of Columbia	4,776	193	390	335
Florida	4,106	52	776	223
Georgia	16,397	367	2,122	956
Kentucky	7,383	65	1,406	420
Louisiana	6,046	127	1,251	355
Maryland	7,538	144	640	274
Mississippi	5,671	74	1,970	775
Missouri	4,862	43	897	337
North Carolina	7,564	104	1,619	565
South Carolina	6,860	183	1,543	505
Tennessee	10,955	121	1,736	592
Texas	6,386	66	2,061	564
Virginia	15,664	243	1,654	912
West Virginia	2,081	7	166	63
Total	118,861	1,575	20,934	7,636

The two preceding tables give the occupations of whites and blacks by sex. It is chiefly valuable in showing to what extent negro women are employed in agricultural pursuits and in domestic service. In 1890 there were 427,220 negro females engaged in agriculture and 432,062 in domestic service. Nearly 1,000,000 of these women were in the list of wage-earners. It is this fact that gives the negro such a relative preponderance in the industrial world. The proportion of negro women and white women engaged in agriculture was about 3 to 1, and in domestic service about 4 to 3, the larger number in both cases being in favor of the negro women. On the other hand, the colored women scarcely figured at all in manufactures and trade and transportation, while the white woman was quite numerously represented.

Agricultural laborers, farmers, planters, and overseers, by race, 1890.

State.	Agricultural laborers.				Farmers, planters, and overseers.			
	Males.		Females.		Males.		Females.	
	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.
Alabama	43,576	75,222	8,650	59,159	103,544	65,247	6,129	6,945
Arkansas	38,566	31,237	2,675	15,200	118,895	36,577	6,126	3,865
Delaware	4,745	3,206	37	16	8,819	809	-----	-----
District of Columbia	274	293	-----	-----	238	32	224	9
Florida	6,743	10,040	719	6,060	23,398	11,843	1,407	1,548
Georgia	56,141	98,400	9,138	50,351	116,111	63,012	7,247	3,563
Kentucky	76,935	26,201	1,358	513	191,302	10,600	9,405	475
Louisiana	24,897	72,144	3,156	45,899	44,250	37,680	2,701	3,467
Maryland	23,649	20,921	492	549	36,516	4,560	1,324	164
Mississippi	25,924	81,444	5,805	67,347	74,864	85,947	5,399	10,675
Missouri	83,144	8,522	683	92	273,313	5,886	11,196	221
North Carolina	65,285	64,163	11,719	30,629	141,186	38,290	9,998	3,077
South Carolina	31,449	85,503	10,731	67,584	56,778	60,378	4,094	5,975
Tennessee	67,674	39,714	2,515	10,106	165,730	30,500	8,700	2,349
Texas	75,916	35,553	2,300	15,784	214,965	48,543	10,835	4,968
Virginia	51,710	56,298	1,311	8,373	102,027	29,403	5,174	1,694
West Virginia	32,773	1,814	462	17	79,542	892	2,690	28
Total	700,301	710,675	67,514	377,679	1,750,478	530,199	92,649	49,023

It is interesting to notice the extent to which negro agricultural workers are acquiring self-direction, and are becoming farmers, planters, and overseers, instead of mere farm laborers. The accompanying table brings out this feature of the inquiry. About 700,000 males of each race were rated as agricultural laborers. There were more than 500,000 negro farmers, planters, and overseers. These figures are quite suggestive of the progress of the negro as an industrial factor in the South. We saw in the section on ownership, that about 230,000 negroes owned their farms and homes. There were 114,269 negroes who owned their farms, so that more than 400,000 others must have risen above the grade of laborers who have not yet acquired their own lands. This is the first step toward acquisition. When a man rises above the lowest grade of agricultural service and gets a foretaste of independent activity in the management and direction either of a hired farm or as overseer for the owner, the next step is personal proprietorship; so that we may say that there are 500,000 negroes who have started on the road to ownership of land. It will be a surprise to those who have never looked into the subject to be informed that the negroes constitute 24 per cent of the farmer, planter, and overseer class. The number of colored women who belong to this grade is nearly 50,000, against 92,000 white women. There were 377,679 colored female farm laborers and only 67,514 whites. The employment of so large a number of females in the hard, bone-breaking work of the farm is indicative of an unsatisfactory social and industrial state. It nevertheless helps to show that all of the available energies of the colored race are expended in developing the industrial life of the South.

Mr. Booker T. Washington is fond of telling a story of an old colored man who objected to the bringing of white immigrants to the South on the ground that there were as many white people there already as the colored people could support. The serious side of this suggestion is more significant than its humorous aspect. The burden of industry in the South falls most heavily upon the negro race. Not even its women are spared the onerous task of tiresome toil. That this labor from beneath supports the general life of the community is as certain as that the mudsill supports the superstructure which rests upon it.

Negro agricultural laborers.

State.	Male.	Female.	State.	Male.	Female.
Alabama.....	75,222	59,159	Maryland.....	20,921	549
Georgia.....	98,400	50,351	Missouri.....	8,522	92
Louisiana.....	72,144	45,899	Kentucky.....	26,201	513
Mississippi.....	81,444	67,347	West Virginia.....	1,814	17
South Carolina.....	85,503	67,584			

While the number of negro male field hands is noticeably small in the border States as compared with the States farther South, the negro woman practically falls out of the equation as a field worker in the higher tier of States.

The number of negroes who have risen from the level of field laborer to the dignity of farmers, planters, and overseers is quite considerable, and is not far behind the number employed as agricultural laborers, so far as the males are concerned. In Arkansas, Florida, Mississippi, and Texas the number of negro male farmers, planters, and overseers surpasses the number of field laborers. This is a fact of striking significance. It shows to what extent the negro is becoming an independent worker in the agricultural industries and how indissolubly he is interwoven in the warp and woof of the agricultural life of the South. As agriculture constitutes its chief productive resource, and as the negro is at the base of this life, he is therefore the real productive factor of that section.

Persons unemployed during a portion of the year only.¹

	Males.		Females.		Aggregate.	
	White.	Colored.	White.	Colored.	White.	Colored.
Agriculture, fisheries, and mining...	898,419	214,193	15,822	93,060	914,241	307,253
Domestic and personal service.....	583,223	99,886	78,425	52,163	661,648	152,049
Manufacturing and mechanical industries.....	800,973	37,970	162,740	5,055	1,023,713	43,025
Trade and transportation.....	227,557	19,172	14,919	189	242,476	19,361
Professional service.....	51,146	3,447	84,823	3,079	135,974	6,256
All occupations.....	2,621,318	374,668	356,734	153,546	2,978,052	545,678
Per cent of population.....					5.42	7.10

¹ These tables apply to the entire United States.

Persons employed during the whole or a part of the year.

	Males.		Females.		Aggregate.	
	White.	Colored.	White.	Colored.	White.	Colored.
Part of year.....	2,621,318	374,668	356,734	153,346	2,978,052	528,214
The year round.....	13,981,829	1,726,711	2,582,307	821,651	16,564,136	2,544,950
Total.....	16,602,147	2,101,379	2,969,041	971,785	19,542,188	3,073,164

Per cent of population employed during a part or all of the year.

	Males.		Females.		Aggregate.	
	White.	Colored.	White.	Colored.	White.	Colored.
Part of year.....	9.33	10.15	1.39	4.05	5.42	7.07
The year round.....	49.57	65.46	6.95	22.02	30.15	34.07
Total.....						41.14

We see that 2,621,318 male whites, or 9.33 per cent of the male white population, were unemployed during part of the year, and 374,668 male negroes, or 10.15 per

cent of the male negro population; 30.15 per cent of the whites of both sexes were employed the year round, against 34.07 per cent of the negroes. It will be remembered that only 30.93 per cent of the white people of the South are employed at all; thus, if we take the negroes of the country at large, they were more generally employed the year round than the white people of the South, including both regular and irregular employment.

The assertion that we see so often reiterated that the negro is an idle and worthless incumbrance upon the life of the South is not borne out by the facts.

Summarizing the results of this chapter, we find that the negro is engaged mainly in agriculture and domestic service; that he is to a much greater degree employed in gainful pursuits than his white neighbor; that he is rapidly becoming a landowner, and much more rapidly an independent farmer and planter; that he is making little or no headway in the mechanical and industrial arts; and that the marked tendency in the far Southern States is toward agricultural labor, while in the border States the drift is toward domestic service.

Taking all these things together it is fully apparent that the negro is the most valuable productive element in the industrial life of the South, and that most of its prosperity rests upon the basis of his toil; that he is therefore justly entitled to share in all the public benefits which his labor makes possible, and that it is the part of wisdom for the white South to encourage him in the development of intelligence, virtue, and industrial skill, so that he may become a more efficient factor in the development of the general welfare.

VI. SPECIAL STUDIES OF THE ECONOMIC CONDITIONS OF THE NEGRO.

The most valuable special studies upon the economic conditions of the negro race are to be found in the bulletins of the Department of Labor. It is the purpose of this Department to make a series of investigations concerning the economic and social relations of this race. The method adopted is to present an exhaustive analytic study of well-defined typical groups of negroes in different sections of the country. Expert investigators are employed by the Department for this purpose. Several such investigations have already been made and still others are under contemplation. When the series shall have been completed the student will have accurate and reliable data from which to draw conclusions. The bulletins so far issued present special studies rather than broad generalizations and speculative dissertations. Of all problems pressing for solution, the American people seem to approach the negro question with the greatest degree of nervousness and impatience. The theorizer reaches his conclusion and leaves the investigator to furnish data for proof, and discards him if he does not. An accurate, analytic, scientific presentation of facts and rational deduction of conclusions therefrom is still an unfulfilled desideratum. The student of sociology, therefore, hails with delight the effort of the Department of Labor, which undertakes this work with adequate machinery and equipment for its successful prosecution. Such work can be done effectively only through some such central and commanding agency. The difficulty with individual and private attempts is that they lack unity of purpose and plan, and therefore the divergent methods and conclusions confuse as much as they elucidate.

Several of these bulletins have been prepared by Dr. W. E. B. Du Bois, that careful, accurate student of the race problem, who is doing more than any other worker in this field to supplant, by scientific method, guesswork and vagaries. Being himself of the race to the study of whose problems he has consecrated his splendid faculties, he not only approaches the subject with the best approved methods of sociological inquiry, but brings also the stimulus and zest of personal solicitude.

THE NEGROES OF SANDYSPRING, MONTGOMERY COUNTY, MD.¹

The Sandyspring community lies in Montgomery County, Md., due north of Washington City. The nearness to the national capital is of great economic importance to the inhabitants of the neighborhood, the southern corner of which is about $3\frac{1}{2}$ miles, in an air line, north of the northern angle of the District of Columbia. Here within a stone's throw, as it were, of the seat of Government, is a thriving agricultural community, among whom still live the descendants of negro families which have been free for a century and a quarter.

The community is of irregular shape, about 5 miles from east to west and about 5 miles from north to south. Sandyspring is in Montgomery County, some knowledge of whose social and economic condition can be gathered from the following statistics:

Population of Montgomery County, 1790 to 1890.

Year.	Whites.	Negroes.	Total.
1790.....	11,679	6,324	18,003
1800.....	8,508	6,550	15,058
1810.....	9,731	8,249	17,980
1820.....	9,082	7,318	16,400
1830.....	12,103	7,713	19,816
1840.....	8,766	6,690	15,456
1850.....	9,435	6,425	15,860
1860.....	11,549	6,973	18,522
1870.....	13,128	7,434	20,562
1880.....	15,608	9,150	24,758
1890.....	17,500	9,685	27,185

a Including 1 Indian.

It will be seen that the two races have made almost exactly proportional gains in 100 years.

The county contains 267,933 acres, of which 193,937 acres are improved. There are 1,959 farms, of the average size of 137 acres; only 177 farms contain less than 10 acres, and 4 over 1,000 acres; 1,641 farms, or 83.77 per cent, were cultivated by owners. The farm produce for 1890 was estimated at \$1,531,760, and the live stock and poultry at \$1,249,790. The basis for the tax levy of 1898-99 was \$12,443,795. The amount levied for the support of the public schools, 1899-1900, was \$30,200. There were 114 public schools, which were open for nine months. Of these, 81 were white schools with 100 teachers, and 33 were colored schools with 40 teachers. For these schools the county received from the State school tax \$16,181.03; from the free-school fund, \$3,154.35; for free text-books, \$6,784.55. The total, including county levy, was \$59,546.60. For the colored schools the receipt for 1898-99 was \$7,477.44 from the State, \$1,107.74 (the proportional amount of county tax paid by negroes) from the county school board, and \$3.33 from miscellaneous sources, making a total of \$8,588.51.

Much side light is thus thrown upon the educational provisions for the two races in this county, and incidentally in other counties of the State.

For a white population of 17,500 persons, there were 81 schools and 100 teachers, at a total cost of \$50,958.09. For a colored population of 9,685 persons, scattered over the same area, there were 33 schools and 40 teachers, at a total cost of \$8,588.51. The per capita cost of the education of each negro child was \$5.74, while that for the county at large was \$16.10. There was 1 white teacher for every 175 of the white population, and 1 colored teacher for every 242 of the negro population. One white school was provided for every 5.2 square miles, and 1 colored school for every 14 square miles. The pay of the colored teachers ranged from \$180 to \$225

¹ Compiled from Department of Labor Bulletin, No. 32, pp. 43-102 (January, 1901), by William Taylor Thom, Ph. D., investigator.

per annum. The average pay of all teachers, including both races, was \$328.90, so that that of the white teachers must have been in the neighborhood of \$400.

It is rather curious to be informed by the investigator that "there is no provision made in the office of the county commissioners or of the county clerk by which property can be identified as held by white or negro owners," when both by law and practice the colored schools receive only that proportion of county taxes paid by negroes.

The settlement of Sandyspring was founded by the Society of Friends. To this fact is attributable the large number of free colored people in the community, as well as its general prosperity and thrift.

The white population of Sandyspring is estimated at about 700 and the negro population at 1,000.

There were 3 schools and 5 teachers for the Sandyspring negroes, 1898-99. The school term was nine months. The salary of the teacher was \$25 a month, and the salaries of the assistants \$20. The total enrollment was 391, only 240, however, belonging to the Sandyspring district proper. Of these 1,000 persons 484 were able to read, 38 could read but not write, while 140 were returned as illiterate. Of the 683 people reported, 70.9 per cent could read and write, 5.5 per cent could read but not write, and 20.5 per cent could neither read nor write.

The negro males were distributed as follows among the several occupations:

Barber	1	Coachmen	3
Mail carrier	1	Domestic servants	3
Mail contractor	1	Engine drivers	3
Merchant	1	Shoemakers	3
Miller	1	At home	7
Shingle maker	1	Not reported	19
Teacher	1	At school	64
Waiter	1	Laborers	65
Bricklayers and stone masons	2	Farm laborers	105
Carpenters	2		
Clergymen	2	Total	313
Hucksters	2		

The females were employed as follows:

Day workers	27	Washerwomen and housewives	51
Day workers and housewives	25	Not reported	30
Domestic servants	72	At home	23
Housewives	49	At school	80
Monthly nurses	5		
Seamstresses and housewives	7	Total	370
Teachers	4	Grand total	683

If we subtract from this number 144 school children and 49 housewives, 49 not reported, and 30 reported as being at home, we have left 411 engaged in gainful occupations. This represents 41.1 per cent of the aggregate colored population. Curiously enough, we have here the identical per cent of negroes thus engaged throughout the United States.¹ There were 153 males and 91 females who had worked at the same place from two to five years. The great majority of females had resided in their present place of residence for more than three years. This indicates a fair degree of steadiness in residence and occupation. There were 205 negro families, with an average of 4.29 to each family. Of the 165 economic families, 63 families own their own homes, 54 were renters, 44 farm hands, and 4 tenure not reported. The average annual rent was \$26.50. One-third of the families had annual incomes ranging between \$250 and \$750. The estimated income and

¹ Occupations of the Negroes, by Henry Gannett, p. 5.

expenditure of a farm hand's family of five persons will be seen from the accompanying table:

Income.		Expenditures.	
Husband (farm hand), \$12 per month ..	\$144	Food	\$88.40
Wife (washing), \$1 per week.....	52	Fuel.....	26.20
Boy, 6 months' labor, \$3 per month.....	18	Clothing.....	50.00
		Rent.....	18.00
		Miscellaneous.....	10.00
		Medical treatment.....	10.00
		Surplus.....	11.40
Total	214	Total.....	214.00

It will be seen that a family may exert itself to the utmost stretch of endeavor, and would have to spend all its earnings in order to maintain the scanty necessities of living. Its earnings are spent with the merchant, the landlord, and the professional classes, each of whom abstracts a surplus percentage in order to meet the cost of public taxation.

Sixty-three females owned their own homes, 54 rented their houses, 44 were farmhands occupying their houses free of money rent, and 4 were not reported as to tenure. There were 92 owners of real estate; the size of the average holding was less than five acres; the assessed value was \$21,590. The county tax rate was \$1.02 per \$100, so that the landed interests alone of the Sandy Spring negroes produced \$258.90 for county revenue.

In the opinion of the investigator, "from an economic point of view, the conclusions drawn from the investigation of this group would appear to be favorable. The Sandy Spring negroes seem to be acquiring and holding property, and the agricultural element of labor among them gives a good account of itself."

THE NEGROES OF FARMVILLE, PRINCE EDWARD COUNTY, VA.¹

Farmville is the county seat of Prince Edward County, Va., and contains about 2,500 inhabitants.

The white and colored population from 1790 to 1890 will be seen from the following table:

Population of Prince Edward County, 1790 to 1890.

Census year.	Whites.	Negroes.	Total.
1790	4,082	4,018	8,100
1800	4,978	5,984	10,962
1810	5,264	7,145	12,409
1820	4,627	7,950	12,577
1830	5,039	9,068	14,107
1840	4,923	9,146	14,069
1850	4,177	7,680	11,857
1860	4,037	7,807	11,844
1870	4,106	7,893	12,004
1880	4,754	9,914	14,668
1890	4,707	9,924	14,694

The white population has remained nearly stationary for a hundred years, whereas the negroes have more than doubled in number. In 1890, the negroes outnumbered the whites more than two to one. There were 487 farms, 318 of which contained between 400 and 500 acres, with only six containing less than 10 acres, and two more than 1,000 acres. Fifty-seven per cent of the farms were cultivated by their owners.

¹ W. E. B. DuBois, Ph. D., investigator. Department of Labor Bulletin, No. 14, January, 1898, pp. 1-38.

The assessed valuation of real estate and personal property was \$2,397,007. On this was raised the sum of \$24,281 for taxation, \$4,714 of which went to the support of public schools. The negroes of the county, in 1895, owned 17,555 acres of land, assessed at \$132,189, against 202,962 acres, with an assessed value of \$164,180, owned by the whites. The number of acres and the assessed valuation of lands held by negroes will be seen from the following table:

Year.	Number of acres.	Assessed value.
1891.....	12,215	\$83,212.48
1892.....	13,207	89,757.75
1893.....	14,754	97,341.53
1894.....	16,467	105,024.48
1895.....	17,555	132,188.06

Farmville is the trading center of six surrounding counties, with a population of 961 whites and 1,305 negroes. The chief industry is the storage, manufacture, and shipping of tobacco, wood-working, coopering, milling, and wholesale and retail merchandising. The total valuation of the town in 1890 was \$661,230, on which a tax of \$9,855 was raised, \$661 of which went to the State school fund and \$1,322 to the town and county school fund. In 1895 negroes owned \$51,240 worth of real estate, or about 7 per cent of the aggregate.

There were 262 families of negroes in the town, about half of whom had moved there since 1880. The town has no school for colored children, but sends them to the district school, just outside of the corporation limits. The school term is six months. The teachers' salaries do not average over \$30 a month. There were 367 children between 5 and 15 years of age, of whom 205, or 55.9 per cent, were in school. Forty-two per cent of the negroes could read and write, 17½ per cent could read but not write, while 40 per cent were wholly illiterate. Four hundred and fifty-nine males were distributed among 41 different occupations. There were 128 teamsters, 58 laborers, 16 domestic servants among the men, and 144 day workers, 65 domestic servants, 23 teachers, and 23 employees in the canning factory among the women. Six hundred and fifty-one persons, or 48 per cent, were engaged in gainful pursuits, against 41 per cent of the negro population of the United States. The average size of the real family was 5.03, and of the economic family, 4.61. Of the 262 families, 114, or 43.5 per cent, own the homes they occupy, and 148, or 56.5 per cent, rent. The estimated amount of rent paid is \$4,872 annually. The income of families ranges from \$50 to \$750. There were five families whose income exceeded the latter limit.

Estimated annual income and expenditure of family of five persons.

Income.		Expenditure.	
Head of family:		Food	\$85.28
24 weeks' labor, at 75 cents per day	\$108.00	Fuel	32.40
16 weeks' labor on farm, at 40 cents per day	38.40	Clothing	50.00
Housewife: Fifty weeks' washing, at \$1.50 per week	75.00	Rent	36.00
		Miscellaneous	15.00
		Surplus	2.72
Total	221.40	Total	221.40

Estimated income and expenditure of family of five persons owning home and in moderate circumstances.

Income.		Expenditure.	
Head of family: 32 weeks' work as carpenter, at 75 cents per day	\$144.00	Food	\$117.00
Odd jobs	30.00	Fuel	30.00
Housewife and boy: Twenty weeks' work at tobacco factory, at \$7 per week	140.00	Clothing	60.00
Total	284.00	Taxes	8.00
		Miscellaneous	39.00
		Surplus	39.00
		Total	284.00

Here we see, as in Sandy Spring, that the average negro family, making the best use of its opportunities, must spend practically all of its earnings in the community, part of which, under any just estimate, goes to the support of public taxation. In 1895 there were 119 negro taxpayers in the corporation on lots and buildings, ranging in value from \$25 to \$3,800. There were 232 white holders of real estate, the highest of whom was assessed at \$16,000. There was a considerable number of negro farmers owning valuable farm lands in the district surrounding the corporation.

The investigator says that "it seems fair to conclude, after an impartial study of Farmville conditions, that the industrious and property-accumulating class of the negro citizens best represents, on the whole, the general tendencies of the group."

THE NEGRO IN THE BLACK BELT.¹

Group 1.—Six small groups, containing 920 negroes, have been studied by the Atlanta University, under the direction of Professor DuBois. All but one of these groups are situated in Georgia. Eleven representative families in Doraville and vicinity were studied, with the result that the average family was found to consist of 11.9 persons. Four of the heads of families could read and write; 5 owned their homes. The farms varied from 1 to 11 acres in extent and were worth from \$100 to \$400. Six families rented their farms on shares and cleared from \$5 to \$10 in cash at the end of each year. Women and girls were employed as farm hands.

Group 2.—Lithonia is a small village of about 800 persons in Dekalb County, Ga., 25 miles east of Atlanta. Negro stonecutters are employed at from \$5 to \$5.50 per week. They rent, for the most part, small two-room frames at \$4 per month. The whites have a private and public school, giving them a term of from eight to nine months. The negro schools comprise a Methodist and a Baptist school, each of which has a term of three months. Sixteen negro families were specially studied. Six of these families owned their homes and had an average yearly income of \$369. The other 10 families paid on an average between \$4 and \$5 a month. Five of these families had an income of less than \$200.

Group 3.—Covington is a village 41 miles southeast of Atlanta, Ga., and contained, in 1898, 3,000 persons. There were between 250 and 300 negro families, 50 of which were chosen for study. The average size of these families was 3.76. There is a public school for negroes open nine months in the year. The principal receives \$50 a month; his two female assistants \$30 a month. The illiteracy among the 50 families does not exceed 10 per cent. There were 8 porters, 6 teachers, 4 barbers, 5 carpenters, 4 laborers, 3 gardeners, 3 office boys, 2 mail agents, 2 drivers, 2 draymen, 2 grocers, 2 ministers, 2 waiters, 1 bartender, 1 fireman, 1 quarryman, 1 contractor, 1 brick mason; of the females there were 11 teachers, 10 seamstresses, 6 cooks, 3 washerwomen, 1 boarding-house keeper, 1 housekeeper, making a total of

¹ Labor Bureau Bulletin, No. 22, May, 1899, pp. 401-417. W. E. B. DuBois, Ph. D., investigator

85 persons, or 45 per cent, engaged in the gainful occupations. The average income is between \$300 and \$500. The majority of the better class of negroes are buying property. The yearly income of the mass of negroes is between \$100 and \$300; of the better class, between \$300 and \$500. Of the 50 families studied, 41 own their homes and 9 are renters.

Group 4.—Marion is in the midst of the black belt of Alabama, where the negroes outnumber the whites 4 to 1. The town has 2,000 inhabitants, equally divided between the races. Thirty-three negro families were studied. The average family contained 5.3 persons. Twenty-eight owned their homes; five were renters. Among the mass of the negro population there are a number who own their homes. Sixty-one persons, or 41 per cent, were engaged in gainful occupations. The public school is poor, but is supplemented by three missionary schools.

Group 5.—Marietta is a town of 4,000 inhabitants, 23 miles northwest of Atlanta. It has a negro population of 1,500, of whom 40 families, comprising 162 persons, were studied. The public schools are fair. Twenty-four families own their homes. Negroes are employed in local industrial works, receiving from 50 to 75 cents per day. The average negro family lives on from \$2 to \$4 a week.

Group 6.—Athens is a city of 10,000 inhabitants, of whom one-third are negroes. Forty-five families were studied. Ten or fifteen were illiterate. Their public schools are well conducted. Thirty-nine of these families own their homes and six are renters. Thirteen families have an income of \$750 a year; sixteen, between \$500 and \$750.

It is probable that the families of the several groups were of the better class, and therefore show a higher average of living and industrial activity than would be true for the groups at large.

CONDITION OF THE CITY NEGRO.¹

The first of the special studies relating to the negro race issued by the Labor Bureau was upon the condition of negroes in cities. The work was accomplished under the general direction of the Atlanta University. Reports were made from 50 negro investigators. These were for the most part college graduates, teachers, doctors, and lawyers, each of whom was expected to study one or more small groups of negroes in his own vicinity. From 10 to 20 houses standing together in portions of the city thought to be representative were taken as constituting a group. The number and distribution of the groups thus studied may be seen from the accompanying table:

City.	Groups.	Families.	Individuals.
Atlanta, Ga.	16	324	1,292
Nashville, Tenn.	10	246	1,090
Savannah, Ga.	5	96	380
Cambridge, Mass.	1	98	366
Washington, D. C.	4	66	293
Macon, Ga.	4	30	90
Jacksonville, Fla.	3	77	327
Columbia, S. C.	3	15	81
Birmingham, Ala.	2	17	63
Tuskegee, Ala.	2	21	119
Orangeburg, S. C.	2	22	109
Sandford, Fla.	1	24	116
Athens, Ga.	1	16	73
Cartersville, Ga.	1	10	53
Louisville, Ky.	1	15	70
Macon, Miss.	1	17	64
Chattanooga, Tenn.	1	21	89
Jackson, Tenn.	1	22	67
Total	59	1,137	4,742

¹ Labor Bureau Bulletin No. 10, May, 1897, pp. 257 and 373. Atlanta University graduates et al., investigators.

The observations were sufficiently widespread to be typical of general city conditions. The average family contained 4.17 persons: This was considerably below the average size of a family for the cities under discussion, as shown by the Eleventh Census. Of 334 families in Atlanta, Ga., 73, or 22.53 per cent, owned the houses in which they lived, while 249, or 76.85 per cent, paid an average rent of \$4.25 per month. Of the 246 families in Nashville, Tenn., 116, or 47.15 per cent, owned their houses, while 123, or 50 per cent, paid an average rent of \$4.68 per month. In the 32 groups located in other cities, of 469 families embraced therein, 157, or 33.48 per cent, owned the houses in which they lived, and 284, or 60.55 per cent, paid an average rental of \$5.51 per month. Some families were paying for their houses on the installment plan.

The occupations and earnings, by families, may be seen from the accompanying typical tables:

GROUP 10.—*Atlanta, Ga.*

Family No.	Head of family.			Children.
	Occupation.	Weeks employed.	Average weekly earnings.	Earnings for the year.
1	Fireman, stationary.....	50	\$7.00	\$132
2	Washerwoman.....	49	3.50	48
3	Cabinetmaker.....	36	7.00	100
4	Drayman.....	52	5.10	-----
5	do.....	52	4.00	690
6	Laborer.....	52	4.00	156
7	Blacksmith.....	52	7.50	-----
8	Coachman.....	52	4.00	130
9	Well-digger.....	52	5 00	90
10	Washerwoman.....	42	2.50	-----
11	Junk dealer.....	52	12.00	234
12	Cook, hotel.....	43	3.50	-----
13	Employee of railroad.....	52	4.00	-----
14	Restaurant proprietor.....	52	6.00	-----
15	Washerwoman.....	52	3.00	922
16	Bandmaster.....	49	10.00	511
17	Stone mason.....	45	6.00	225
18	Mattress maker.....	48	7.00	91
19	Hack driver (proprietor).....	52	12.00	-----
20	Cook, family.....	49	.50	-----
21	Washerwoman.....	52	1.50	-----

GROUP 5.—*Other cities.*

Family No.	Occupation.	Head of family.		Children.
		Weeks employed.	Average weekly earnings.	
1	Carpenter.....	(¹)	\$13.00	-----
2	do.....	52	12.00	-----
3	Barber, proprietor.....	52	25.00	-----
4	Letter carrier.....	52	14.00	\$220
5	Carpenter, lodging-house keeper, and capitalist.....	52	75.00	212
6	Merchant, boots and shoes.....	52	15.00	-----
7	Merchant, lumber.....	52	15.00	-----
8	Cigar maker.....	52	12.00	-----
9	Not reported.....	-----	-----	260
10	Barker.....	52	12.00	-----
11	Steward of a club.....	52	20.00	-----
12	Carpenter.....	52	12.00	208
13	Physician.....	52	20.00	550
14	Clergyman.....	52	12.50	530
15	Carpenter.....	52	12.00	326
16	Barber.....	52	12.00	520
17	Clergyman.....	52	25.00	-----
18	Post-office clerk.....	52	16.00	294
19	Compositor.....	52	8.00	-----
20	Store porter.....	52	10.09	218
21	Barber.....	52	12.00	520
22	Longshoreman.....	52	10.00	-----
23	Contractor, building.....	52	15.00	218
24	Contractor, building.....	52	50.00	-----
25	Barber, proprietor.....	52	15.00	-----
26	Merchant, boots and shoes.....	52	25.00	560
27	Waiter, head, hotel.....	40	25.00	2,496
28	Teacher.....	32	12.50	240
29	Merchant, commission.....	52	50.00	300
30	do.....	52	30.00	936
31	Clergyman and capitalist.....	52	40.00	780

¹ Not reported.

Nashville, Tenn.

Family No.	Head of family.			Children.
	Occupation.	Weeks employed.	Average weekly earnings.	Earnings for the year.
1	Carpenter	35	\$15.00	\$1,122
2	Laborer	52	5.00	463
3	Carpenter	52	9.50	118
4	Washerwoman	52	2.00	-----
5	No occupation, charity	-----	-----	-----
6	Porter	41	6.00	12
7	Cook, restaurant	46	9.00	-----
8	Clergyman	52	30.00	98
9	Porter	52	7.00	173
10	Furniture merchant	52	25.00	39
11	Teamster	52	6.00	108
12	Saloon keeper	52	15.00	-----
13	Hack driver	30	10.00	163
14	Shoemaker	52	7.00	-----
15	Cook, family	26	2.50	-----
16	Engineer	52	8.00	182
17	Porter, railroad	52	15.00	260
18	Teamster, with team	52	5.00	536
19	No occupation	-----	-----	416
20	Sorter, lumber	52	6.00	100
21	Teamster	39	6.00	-----
22	Gauger, lumber	52	9.50	-----
23	Carpenter	30	7.50	428

These figures give quite a clear idea as to the steadiness of employment among negroes, as well as to the character of their occupation; 41 out of 60 heads of families in the groups here presented were employed 52 weeks during the year.

In the city of Atlanta, Ga., out of a total of 324 families, 73, or 22.55 per cent, were supported wholly by male head of family; 31, or 9.57 per cent, wholly by a female head, and 81, or 25.93 per cent, wholly by a male and a female head of family. It is suggestive that 63.27 per cent of the families were supported wholly or in part by the mother; all of which goes to show to what an extent negro females are wage-earners in our cities.

The death rate of the negro race was given much attention in this investigation. The vitality of a people affects all the relations which it sustains to the community, whether economic or social. The general conclusion on this point is that the negro's death rate is about as 8 to 5 when compared with the whites, and that this excess is due mainly to remedial sanitary causes.

While these studies are not sufficient to enable us to draw infallible conclusions, yet we have here a body of data covering a wide area and a great diversity of conditions. We are at present concerned only with the economic side of these investigations in so far as they throw light upon the negro as a contributing factor of the several communities, who thus helps to support the burden of public taxation; and more especially the extent to which he contributes directly and indirectly to the education of his children. To this end it is essential to know (1) to what extent he has become a property owner; (2) to what extent he is tenant, and the money value of his rental; (3) how generally he is engaged in gainful occupations, and the manner in which he disposes of his earnings.

We saw that of 1,000 persons composing 165 families, at Sandy Spring, Md., 92 persons were owners of real estate; 63 families, or 38.2 per cent, owned the houses in which they lived; 54, or 32.7 per cent, paid money rent for the houses they occupied, and 44, or 26.7 per cent, occupied houses on the farm as a part of the stipulated agreement; 4 were not accounted for as to conditions of tenure. Forty-one per cent of the entire population was engaged in gainful occupations, and on the average a family must spend in the community nearly or quite all of its earnings in order to meet the ordinary requirements of living.

In Farmville, out of 262 families, 114, or 43.5 per cent, owned their own houses;

148, or 56.57 per cent, rented the houses they occupy, at an average rental of \$4.872 annually. Forty-eight per cent of the entire population was engaged in gainful pursuits, and, as at Sandy Spring, the average family must spend nearly or quite all of its earnings in order to live. The Black Belt reveals the same conditions.

In group 1, 5 out of 11 families owned their own homes, the other 6 rented their farms, and both sexes worked as farm hands.

In group 2, 6 out of 16 families owned their homes, and 10 families paid rent, from \$4 to \$5 monthly. The men were generally employed.

Forty-five per cent of group 3 were employed and the majority were reported as buying property. Of 50 families, 41 owned their own homes and 9 were renters.

In group 4, 28 out of 33 families owned their homes, and 5 were renters. Forty-one per cent were distributed among the various lines of industrial pursuits.

Group 5 showed 26 out of 40 families owning their own homes.

Group 6 yielded 39 home owners out of 45 families studied, and 6 renters.

When we turn to the cities, in Atlanta, Ga., 73 out of 324 families, or 22.53 per cent, owned their own homes, while 249 families, or 76.85 per cent, paid an average rental of \$4.25 per month. In Nashville, Tenn., 47.15 per cent of the families studied owned their homes and the rest paid an average rental of \$4.68 per month. For the other cities in which investigations were made, of 32 groups in all, 33.48 per cent owned the houses in which they lived and the rest paid \$5.50 average monthly rental.

That these families were steadily employed at wages not much more than sufficient to meet the urgent necessities of life can be judged by glancing at the tables under the head of city groups. Thus we see that the negro spends, and is spent in the several communities in which he resides, the little mite which, by the most rigid economy, goes to permanent accumulation after meeting the physical necessities of life, representing only an insignificant fraction of his energies. The productivity of his labor enhances the industrial and economic power of the community. His expenditures swell the bulk and profit of the merchants' business. From the rents collected from his black tenant the landlord pays the taxes on his tenements, and in every sense the negro is a vital contributing factor in the economic welfare and is justly entitled to his due share of public privileges.

VII. THE EDUCATION OF THE CITY NEGRO.

The urban negro constitutes a distinct problem from his rural brother. In their industrial status, social environments, and educational facilities they are widely asunder.

In discussing the education of the negro it is not usual to discriminate between the two classes, but to include the entire race under the same formula. The economic conditions of the Southern cities are so different from those of the country, and the educational provisions are so glaringly discrepant, that the two must be separated in any scheme of profitable discussion. The negro's educational fortunes have, perhaps, the widest margin of variation. His school opportunities in the cities are more nearly equal to those of the whites than in the rural districts. Thus the gap between the educational status of the two classes is emphasized. In the rural districts, where the school term covers only four or five months, and where economic and industrial conditions are such that the scholars do not attend regularly for even so short a term, it may be easily seen that the curriculum can not profitably be patterned after the city courses, with their superior advantages and facilities. When we consider that an average country child attends school for only a few terms, it appears that his entire schooling is scarcely equal to four grades of the city curriculum. On the other hand, the negro city school has all of the essential advantages of up to date scholastic requirements.

Cities of more than 5,000 colored inhabitants in 1890.

State and city.	White population.	Colored population.	Expenditure for school purposes, 1898-99.	School expenditure for State, 1899-1900.
Alabama:				
Birmingham	14,909	11,254	\$38,764	\$1,300,000
Mobile	17,429	13,630	76,644	.....
Montgomery	8,892	12,987	.....	.....
Arkansas, Little Rock	16,114	9,739	67,599	1,369,709
Delaware, Wilmington	53,754	7,644	229,332	418,479
District of Columbia, Washington	154,695	75,572	.....	1,323,000
Florida:				
Jacksonville	7,372	9,801	57,613	710,919
Key West	12,390	5,654	12,209	.....
Pensacola	6,001	5,743	18,847	.....
Georgia:				
Atlanta	37,416	28,098	142,345	1,807,815
Augusta	17,395	15,875	94,686	.....
Columbus	9,276	8,025	45,862	.....
Macon	11,538	11,203	80,963	.....
Savannah	20,211	22,963	121,238	.....
Kentucky:				
Lexington	13,020	8,544	86,171	3,163,000
Louisville	132,457	23,651	685,063	.....
Louisiana:				
Baton Rouge	4,444	6,027	.....	1,185,116
New Orleans	177,576	64,491	398,000	.....
Shreveport	4,439	7,532	16,000	.....
Maryland, Baltimore	367,143	67,104	.....	3,159,503
Mississippi:				
Meridian	5,442	5,178	25,076	1,165,840
Natchez	4,858	5,241	.....	.....
Vicksburg	6,164	7,204	.....	.....
Missouri:				
Kansas City	118,821	13,700	545,988	7,184,250
St. Louis	424,704	23,865	2,118,454	.....
North Carolina:				
Charlotte	6,417	5,134	.....	963,045
Newbern	2,572	5,271	.....	.....
Raleigh	6,320	6,348	.....	.....
Wilmington	8,731	11,324	.....	.....
South Carolina:				
Charleston	23,919	30,970	112,720	769,815
Columbia	6,563	8,789	31,751	.....
Tennessee:				
Chattanooga	16,525	12,563	43,000	1,661,144
Knoxville	16,106	6,423	55,633	.....
Memphis	35,766	23,706	182,607	.....
Texas:				
Dallas	30,006	7,993	.....	5,485,291
Galveston	22,316	6,722	105,461	.....
Houston	17,178	10,370	111,061	.....
Virginia:				
Alexandria	9,226	5,113	.....	1,971,264
Danville	4,764	5,583	.....	.....
Lynchburg	9,903	9,802	.....	.....
Norfolk	18,672	16,244	.....	.....
Petersburg	10,456	12,221	.....	.....
Richmond	49,034	32,330	.....	.....

The foregoing table reveals 46 cities in the Southern States with a negro population of more than 5,000, ranging from that limit up to 75,000. Twenty-two cities have a negro population above 10,000, 11 cities above 20,000, and three above 50,000. We have here an aggregate population of well nigh three-quarters of a million negroes collected in large municipal centers. The number of urban negroes exceeds the population of the State of Maine. Constituting about 10 per cent of the entire race, this body is too large to be ignored in any comprehensive treatment of the race problem.

The movement of population toward cities constitutes one of the most marked sociological phenomena of our times. The negro follows in the wake of this movement, and, although he does not seem to possess a profitable economic status in the centers of commerce and marts of trade, he is attracted by the allurements of city life as a moth by the glare of a candle. Perhaps the most pressing phase of the

race problem is presented by city conditions. The country negro is embalmed, as it were, in a state of nature, where he will be preserved, physically at least, until his opportunity comes. With the city negro, on the other hand, it is immediate rescue or destruction. The rural negro flees from the country, with its meager opportunities, to the city, with its congenial social circles and school privileges, unmindful of the fact that he is swapping industrial conditions with which he is familiar for those of which he has no knowledge. This constant influx of raw rural recruits imposes new problems upon city schools, for with a crude and undeveloped people the schools must fulfill not only the ordinary function of education, but must supplement defective home training. The city negro therefore presents a distinct educational problem with many interesting and peculiar features.

In the rural districts of the South the school fund is woefully inadequate to support a satisfactory system. The duplication of schools in the same territory for the two races serves to accentuate this inadequacy. In the cities the funds are much more ample, and though they fall far short of the educational provisions made in the other sections of the country, nevertheless they are sufficient to provide the essential facilities of instruction and to keep the schools in operation for the full length of term. The division of the school funds on racial lines does not work so great a hardship in cities as in rural places, where the population is sparse.

*Per capita school funds for States and cities of the South.*¹

State and city.	Per capita for—		State and city.	Per capita for—	
	State.	Cities.		State.	Cities.
Alabama:			Mississippi, Meridian	\$0.75	\$2.37
Birmingham	\$0.71	\$1.84	Missouri:		
Mobile			Kansas City	2.31	5.50
Montgomery			St. Louis		
Arkansas, Little Rock			North Carolina:		
Florida:			Charlotte .....	.59	-----
Jacksonville	1.34	1.90	Newbern		
Key West			Raleigh		
Pensacola			Wilmington		
Georgia:			South Carolina:		
Atlanta .....	.71	2.60	Charleston .....	.57	2.06
Augusta			Columbia		
Macon			Tennessee:		
Columbus			Chattanooga .....	.83	2.74
Savannah			Knoxville		
Kentucky:			Memphis		
Lexington	1.48	4.22	Texas:		
Louisville			Galveston	1.80	3.83
Louisiana, New Orleans .....	.82	1.64	Houston		
Maryland, Baltimore	3.07	-----	Virginia	1.19	-----

This table shows the school funds for the several States and cities under discussion, and the cost per capita for school expenditures. It is seen that the provisions for the cities enormously exceed those for the State at large. In Alabama the per capita cost of education is only \$0.71, while in the three leading cities of that State it is \$1.84. In South Carolina the State educational fund is only \$0.57, while for Charleston and Columbia it is \$2.06. If we should separate the cities from the rural districts, it will be seen that the per capita cost of the rural schools would fall much below the figures in the table. Let us not forget, also, the relative densities of the population as an essential factor of efficiency.

The courses of instruction for the colored schools embrace the ordinary primary and grammar grades, and in some of the cities high schools are also provided. The Supreme Court of the United States has recently decided, however, that a city is not compelled to maintain a high school for the colored race because it maintains one for whites.²

¹ Population for 1890 and expenditure for 1898-99.

² One hundred and seventy-fifth United States Reports, p. 523, decided December 18, 1899.

The teaching force in city colored schools is more or less proficient from a professional standpoint. The colored teachers compare quite favorably with their white collaborators. The schools furnish the only avenue of profitable employment above domestic service for colored women, and therefore the best equipped members of the race are thus engaged. The colored school teachers, male and female, receive on an average better pay than any other class of colored men or women in the several communities. They are looked up to as leaders in social life and public activities. This gives to the colored schools a relative advantage which the whites do not enjoy, for their best energies flow in other channels.

On the whole, it might be said that the urban negro's educational opportunities, so far as elementary instruction is concerned, are fairly ample, though of course far from ideal. Intellectual opportunities are open to every colored boy or girl which, among white youth, are counted sufficient to prepare for the ordinary duties of life. The educational facilities for colored children in the communities under discussion are, perhaps, superior to those offered the white race on a similar scale thirty years ago.

The true aim of education is to make the recipient wiser and better and to render him a more efficient instrument for service. Its beneficial effect is measured in terms of knowing, being, and doing. That the education of the negro has vastly increased his knowledge and tightened his intellectual grasp upon the problems of life can not be denied or doubted. The practical function, however, is far from fulfillment. The industrial life of the race has in no sense kept pace with its intellectual improvement. The negro labors to-day under the same industrial disabilities as he did thirty years ago. His education has neither enabled him to counteract the effect of hostile industrial influences nor to make himself independent of them. Indeed, he is daily losing industrial ground which he occupied when the dissemination of knowledge was not so general. It is doubtless true that to a large degree the cause of industrial decline is due to the operation of social forces which he can in no way direct or control; but the plain fact remains, and the educational effort of the future must occupy itself largely with means of meeting these industrial deficiencies.

Just here arises the perplexing question as to what modifications must be made in the general pedagogical programme in order to answer the peculiar needs of the negro race. All will agree that in any rational plan of education the scheme of instruction should be adapted to the needs, capacities, and probable vocation of those for whom it is proposed.

Existing programmes were adapted to the capacities and needs of the white race, and handed down to the negro on the somewhat generous principle that what is good for the white goose is good also for the black gander. It is true that in fundamental requirements and laws of growth the human mind is one and has the same formative needs. Knowledge and virtue have no ethnic quality. The multiplication table and the sermon on the mount do not accommodate themselves to local environments. The mind of the negro has the same faculties, powers, and susceptibilities as that of his white confrère. No competent authority has ever pointed out just where the two differ in any evident feature, and yet the average status of the races are so far asunder that the educational needs must be divergent at many points.

It would not be wise here to enter upon the intricate question as to the relative capacity of the two races. Any discussion of potential capacity would be wholly speculative and void of practical value. The practical educator must be governed by that component of capacity which is available for practical work. Suppose the pupil can attend school only a fraction of the time, or that by reason of necessary detention he is habitually absent or tardy, or that he is so poorly fed and illy clad that the strain and stress of physical necessity enfeebles his intellectual energy, or that the course and tone of his home life stifles rather than stimulates

his budding faculties. Can these factors be ignored with impunity? Would it be wise to proceed as if such obstacles did not exist? The negro constitutes the submerged element, and of necessity furnishes an excess of the defective, delinquent, and unfortunate classes. We should not forget that the object of public schools is to benefit the masses. Their plan and scope should be adapted to the capacity and condition of those for whose welfare they are intended.

The main concern of the college and the university is with the highest common factor, but the public schools must deal with the lowest common multiple. There are in every community many colored children who, by reason of exceptional faculties or good early influences, would easily take intellectual rank with superior persons of the dominant race. This fact is demonstrated wherever mixed schools exist. But the negro race is a race of extremes; there is little continuity of development; his growth is by leaps and bounds. The field hand or house servant of yesterday becomes class orator at a Northern college to-morrow; but the 10,000 field hands and domestic servants whom he leaves behind continue to pursue the daily humdrum of their stupid toil. It is perhaps generally true that the effect of the diffusion of knowledge is to increase the general capacity rather than to improve the extreme cases of ability. While three centuries of intensive culture has lifted the average status of the English race by many degrees, it has not enabled England to produce individuals superior to Shakespeare or Bacon. If this contention be correct, it is but natural to expect that the exceptional colored pupil will deviate widely from the normal average. This fact makes a just and equitable scheme a matter of great perplexity. The main feature of the programme should be placed near the center of gravity, with as wide a latitude of privilege as is compatible with the main purpose.

If, therefore, it should appear that prevailing schemes are not suited to the exigencies of circumstances, there should be no hesitancy in adopting such modifications as the necessities of the case require. No maudlin sentimentality should be allowed to prevent such sensible adaptation.

It might be argued with a considerable show of reason that it would be an unwise and dangerous acquiescence to acknowledge that there might be any divergence in the plan, scope, or method of public instruction. It is here that the humble are exalted and the mighty brought low until they meet upon a common level. The rich and the poor meet together; the state is the teacher of them all. The state, it may be claimed, has no right to discriminate among its subjects. The primary fact of discrimination is seen in the scholastic separation of the races. We should make the best use of the agencies in hand.

It might also be argued that it is inexpedient from the negro's standpoint to acknowledge that the negro child requires any treatment different from that of the white child. This feeling is already too prevalent, and if once the precedent be established there is no telling where the innovation will end. Many believe that the whites are only waiting for a reasonable excuse to readjust the negro's education to what they think it ought to be. This objection is not without much validity and goes to show that such modification should proceed along wise, cautious, and conservative lines, effecting only a sensible adaptation of effort to condition. Our duty is to our day and generation. Future generations will have their own problems and their own facilities for solving them. We can no more establish educational régimes for the future than we can prescribe the style of bonnet or cut of gown for our great-granddaughters. If at any time in the future the social and economic status of the races should come nearer together than they are to-day, can we not rely upon the wisdom and good sense of that time for a wise readjustment of régimes? All the hopes of the negro for a larger and better future rest upon the basis of this reliance.

The wild clamor for identity of plan and method without examining into fitness and adaptability shows a lack of self-knowledge, self-confidence, and self-respect.

Imitation without intelligence leads to grotesque and dangerous results. It is related of a Chinaman that when taking his first lessons in cooking he observed that his preceptress rejected every other egg out of a dozen, and when it came his turn to repeat the experiment this disciple of the kitchen, exercising a characteristic facility for imitation, rejected the eggs in the same order in which he observed his mistress had done; but as the rotten eggs happened to be differently distributed in the two cases, the pupil was subjected to the double chagrin of wasting his mistress's eggs and of spoiling her cake. By apish imitation, without intelligent discrimination, we may waste eggs and spoil the cake in a pedagogical as well as in a culinary sense.

Every subject in a programme of study, as well as every plan and method of impartation, should be interpretable in terms of actual needs and conditions. In a community where there is a considerable fraction of foreign population, there might be sufficient reason for introducing the vernacular of that element in the school programmes. Such language might be serviceable in the conduct of business and social intercourse, or might lead to a cultivation and enjoyment of ancestral literature and life; but there could be no such motive for adding similar lines to the colored schools. This does not apply to the educational value of language, but to its practical bearing and use. The attempt to master a foreign tongue before the pupil can secure harmony among the parts of speech in his own vernacular is grotesque and irrational.

A large proportion of white pupils on leaving school will enter upon business careers, either as occupants of prepared places or on their own responsibility. It is but reasonable, therefore, that professional business courses should form a part of their regular programme. But not one colored child in a hundred is likely to enter upon such a career. While the negro needs to be instructed in business forms and methods, the motive in the two cases is entirely different. The subject should be approached from the direction of the motive, reason, and end in view, and not in the spirit of observing a superficial sameness. Prof. Booker T. Washington will go down to history as one of the greatest educators of his day, perhaps as the greatest. His success is due mainly to the fact that he does not copy methods that have been exploited under other and more favorable conditions, but has devised plans for his constituency adapted to their present environment.

It must not be supposed, however, that the state owes less to the colored than to the white child. Although the needs of the negro child may often differ from those of the white child, yet they are rather greater than less. It certainly requires as great an outlay and as assiduous an effort to bring him up to the required standard of good citizenship.

Let us now consider some of the especial and distinctive features which should be made prominent in colored schools. Although many of these features are common to the needs of all schools, nevertheless in their application to the negro in the present state of his needs specialty of condition demands a more decided emphasis.

There is much dispute among educators as to the exact function and value of kindergarten training, but all will agree that it is of the highest importance to children of the neglected classes. No clearer statement of the case can possibly be made than was done by the superintendent of schools for Baltimore in a recent annual report:

Many children are compelled to leave school by the time they are old enough to earn wages to help support the family. Consequently many of them must receive all of their schooling before they are 10 years of age. In order to afford this class of children, found generally in the slums and in the most forlorn parts of the city, better opportunities for improvement it is very desirable to organize schools in such sections for the instruction of children between 3 and 6 years of age. Kindergartens would lengthen the school life of such children about three years and rescue them, for a time at least, during the most impressionable period of their

lives from the evil influence of homes in which idleness, vice, and crime are the daily examples set for their imitation. If the young children of idle, thriftless parents could be taken from their homes and subjected daily to the humanizing and enlightening influences of good schools, in charge of properly qualified teachers especially adapted to the performance of such work, many of them would be doubtless rescued from leading such lives as they see daily those among them living, and instead of growing up in ignorance and vice, to increase the number of idle and lawless, they would become industrious and law-abiding citizens. Such schools must constitute an important feature of any successful scheme the city may be compelled to adopt in its own protection.¹

These words apply with especial emphasis to the colored race, which supplies a large part of the submerged element. The criminal and vicious tendency of a large fraction of the negro population is alarming in its proportions. The ordinary process of education seems to have but little beneficial influence. Some method must be devised to reach, to help, and to save them. The state will be forced to animadvert to this matter for its own protection and defense. The kindergarten is the only institution yet proposed which promises the desired relief. The expense of such schools would doubtless be enormous; but it is poor economy that saves in the educational department only to add to the criminal budget.

There are only two ways by which children of degrading environments can be rescued. One is to take hold of them at a tender age, before they reach the ordinary school period, and give their thoughts, feelings, and aspirations the proper direction and trend. The other is to keep them in school for a sufficient length of time to appreciate the transforming power and refining influence of knowledge and culture. So far as the masses are concerned this last remedy is impossible. The first years of school life are spent in mastering the hard mechanics of learning. There is little or no reflex influence upon the life and character. This must come, if at all, at an earlier or a subsequent date. The school influence must reach lower down in the life of the negro child. The human twig is given its moral bent and inclination before reaching the ordinary school period, and the whilom effect of routine instruction can scarcely prevent it from growing into a twisted and distorted trunk.

The State establishes and maintains schools for the sake of producing a better grade of citizenship. In order to succeed with the submerged element it must step in loco parentis and take hold of the child while it is yet susceptible to moral impressions. This is not a charity or vicarious benevolence, but a plain duty demanded by every consideration of enlightened self-interest. It is as essential that the State protect itself from such internal evils as it is to maintain the Army and Navy to ward off foreign foes. The great difficulty with the ordinary colored child is that he enters the school too late and leaves too soon to derive from it the full benefit which it is calculated to impart. The term can be lengthened more easily and more profitably from below than from above. Let the education of the negro reach down before reaching up, and if there needs be a choice let it reach down rather than up, but let it always reach as far as possible in both directions.

To the white child the essential aim of education is to enable him to fit into an established social and industrial order. The negro child must endeavor to improve the status of his race. There is no one who has gone before to prepare a place for him. The teacher of the negro child needs more of the spirit of the missionary to arouse and quicken his lethargic energies into life and activity. Every successful teacher must be devoted to duty, but the colored teacher should be consecrated to a cause. He needs not only professional zeal for the work, but also the ardent devotion of a moral enthusiast. Every such teacher should regard himself as a laborer in the vineyard of humanity and not merely as a pedagogue peddling his services for pay.

¹ Seventeenth annual report of the Board of Commissioners of Public Schools of Baltimore, 1898, p. 102 et seq.

The Northern missionaries who came South immediately after the war to labor among the recently emancipated slaves would hardly be accounted educators in the modern sense of that term. Many of them were not even educated, and yet by reason of their missionary zeal and moral enthusiasm they wrought marvelous transformations. The State, with its more competent secular agencies, has supplanted them in the educational field, but it can neither hire nor demand the subtle spirit. It can only exact outward decency of behavior and a reasonable proficiency of service. The spirit of enthusiasm and consecrated zeal must spring from the consciousness on the part of the teacher that his own welfare is indissolubly linked with that of the masses whom he is commissioned to enlighten.

The negro child needs especially to be rooted and grounded in the concrete principles of things. It is characteristic of tropical temperaments to revel in intellectual subtleties and fine flights of fancy while ignoring the material things by which they are surrounded. Races and nations remain in a backward or barbarous state because they fail to heed the divine injunction to subdue the earth. All attempt to escape the difficulties of earth by building a tower to reach to the skies must end in a confusion of tongues. The Anglo-Saxon has gained his present eminence among the nations because he is of the earth earthy. He delves while others soar; he applies while others speculate. The Anglo-Saxon is not superior to other men in intellectual gifts or moral endowments. For intellectual subtlety and spiritual perception the Hindoo is conceded to be his equal, if not his superior, and yet when it comes to bringing things to pass one Englishman is equal to a thousand Asiatics. A close study of the Yankee reveals the fact that he is equal to almost any practical emergency, even when he has a rather slender basis of intellectual equipment. On the other hand, the negro is rather theoretical than practical. He knows immensely more than he can do. His practical prowess has by no means kept pace with his intellectual achievements. Slavery taught him to work by rule and rote, but not according to plan and method. The first effect of intelligence was, naturally enough, to disgust him with manual toil, which stood to him as a reminder of slavish drudgery. He has never learned the gospel of work or the joy of service, because he has never entered into it with intelligent plan and purpose. A thought is married to a thing and an enterprise is born, but when thought is divorced from things there is nothing but sterile speculation and barren criticism.

The greatest need of the negro is to bring the wild energy of his muscle under the guiding intelligence of his mind. In all his experience he has not been compelled to observe the fine adaptation of effort to task, but he has been confined to such crude lines of service that the vaguest approximation was deemed sufficient.

There are only two ways by which a people may gain proficiency in practical things. One is by long familiarity and practice in controlling affairs until the habit becomes fixed and is handed down by heredity. The other is by means of education of the young. The latter process is by far the more rapid, and is indeed the only course open to the negro at the present time. The child learns in a few years what it took the race half a dozen generations to acquire. If education can not overcome heredity, it can at least discount it by an enormous per cent.

The negro child needs to be trained in practical judgment, a faculty in which it must be conceded he is woefully deficient. He is too apt to commit to memory rather than to the understanding. If the average child were put to the test as to the weight and value of things which have become familiar by glib recital or required to interpret the verbal image of ideas in terms of their concrete equivalents, the results would be grotesque indeed. His information should be interpreted in terms of his own thoughts, feelings, and volitions. He should be made to feel that all lines of knowledge radiate from him as a conscious center. The method of impartation should be actual, factual, factual. The old adage tells us that knowledge is power, but this applies only to digested and assimilated knowl-

edge. If one takes food into his stomach and fails to digest it, it not only does not give him added strength, but saps from him the strength already acquired. Intellectual indigestion acts in about the same manner as the corresponding physical ailment. Negro youth are everywhere suffering from intellectual indigestion, and there is danger of a race of mental dyspeptics. The only remedy is through a method of education which shall observe a just balance between the abstract and concrete.

The complaint is universal that our school curricula are overcrowded and that the pupil can get only a smattering of the kaleidoscopic programme. If this be a detriment to the white youth, it must be doubly so to the negro child, who may be the first, or well nigh the first, in the history of his race who has learned the use of letters. A little learning is a dangerous thing, and especially so if dissipated over too wide an area. The white child is apt to be steadied and balanced by his setting in society; the negro can hope for no such corrective influence. He is likely to overestimate his capacity and attainments and to make a miserable fizzle in an ambitious career, where he might have made a useful and respectable citizen in a more modest sphere. Or he may become a vainglorious, self-conceited egotist, disgusting sensible men with a showy display of shallow learning. To correct this tendency the courses should be judiciously limited in range and scope and a thoroughness of mastery rigidly insisted upon.

All that has been said under the head of concrete methods emphasizes the importance of manual training. The negro was brought to this country to labor with his hands. For more than two centuries he has fulfilled this manual mission; and for many years to come this must be his chief function in society.

He should be taught to do with skill, accuracy, and method that which inevitably devolves upon him. Being shut out from the shops he must look to the school for the only means through which he may be prepared to gain and retain a satisfactory status in the industrial order.

Manual training must be carefully discriminated from industrial education. The one looks forward to definitely established lines of work, the other to the acquisition of power. So far as we can judge the future by the present, it would be almost useless to equip any considerable number of our colored youth in our large cities with mechanical trades. They would have few facilities for plying them. The colored workman is rigorously excluded by organized effort. He labors under the double disadvantage of being weak and of being black. This makes the negro's industrial outlook a very unpromising one. The real hope is that he may be driven to take the industrial initiative, as the spirit of caste has already developed in him ecclesiastical independence and social self-sufficiency.

The real demand is for manual training which will enable him to do with mind as well as with might what his hands may find to do.

Nine-tenths of the negroes in cities must make their living by bodily labor and domestic service. More skill, intelligence, and character must be put into these lines of work.

Whatever may be said of the universal requirement of a system of education in the abstract, all will agree that the practical programme must have reference to the probable vocation of its recipients. The negro race can not escape this law. The bulk of them for all time that we can foresee must earn their livelihood by some form of manual labor. The following table shows the occupations in which city negroes are generally engaged. There are no potent forces at work which will materially modify this programme within any calculable period of time. The table shows that in all of the largest cities of the South 98,470 males and 79,429 females were employed in gainful occupations, making a total of 177,899. Of this number 60,172 men were employed as laborers, servants, draymen, teamsters, messengers, etc., and 37,686 women followed domestic and laundry service. It is

within these industrial lines that the negro must live and move and gain a livelihood. His education, therefore, should have direct bearing upon that sphere of industrial activity.

Occupations of negroes in cities.

MALES.

City.	All occupations.	Laborers.	Servants.	Draymen, teamsters, etc.	Messengers, porters, etc.
Atlanta, Ga.	7,916	2,357	1,134	775	300
Baltimore, Md.	19,342	5,498	3,507	2,586	1,139
Charleston, S. C.	8,777	2,610	852	503	280
Kansas City, Mo.	5,160	1,528	1,331	383	188
Louisville, Ky.	9,236	3,123	1,356	1,232	288
Memphis, Tenn.	7,161	1,143	990	1,052	565
Nashville, Tenn.	8,100	2,566	1,017	1,803	324
New Orleans, La.	15,051	7,455	1,374	1,096	321
Richmond, Va.	8,590	2,248	1,100	805	305
St. Louis, Mo.	9,137	2,248	1,542	921	519
Total.	98,470	31,584	14,203	10,156	4,229

FEMALES.

City.	All occupations.	Servants.	Laundresses.	All other occupations.
Atlanta, Ga.	6,857	3,310	2,986	561
Baltimore, Md.	18,676	10,732	6,191	1,733
Charleston, S. C.	7,098	2,319	2,638	2,141
Kansas City, Mo.	2,554	1,362	972	220
Louisville, Ky.	6,281	3,229	2,455	597
Memphis, Tenn.	6,010	2,973	2,283	754
Nashville, Tenn.	6,509	3,372	2,465	672
New Orleans, La.	12,860	5,215	4,635	2,930
Richmond, Va.	8,238	4,500	2,086	1,652
St. Louis, Mo.	4,326	1,800	2,043	483
Total.	79,429	38,932	23,754	11,743

The question of sex as a factor in education has recently received much attention. One of the most striking phenomena of the city negro is the relative excess of women. Strangely enough, this phenomenon seems to have escaped attention. The economic conditions which prevail in the rural districts are sufficient to account for this condition of things. The women are not well suited to farm labor; they can not enter into competition with men in such arduous tasks. On the other hand, there is an unlimited demand in the cities for competent and efficient colored females in the domestic sphere. It is not surprising, therefore, to find an enormous preponderance of women in the large centers. This excess of the female element conditions all phases of urban negro life, whether in home or church or general society. The school also feels its controlling influence.

Total population, school population, and school attendance of negroes in cities having more than 5,000 negro inhabitants.

	Population.		School population.		Number of pupils in school.	
	Males.	Females.	Males.	Females.	Males.	Females.
Alabama:						
Birmingham	5,511	5,758	1,716	2,007	664	798
Mobile	6,100	7,547	2,293	2,603	538	612
Montgomery	5,413	7,578	1,994	2,642	-----	-----
Delaware:						
Wilmington	4,738	4,311	-----	-----	-----	-----
Arkansas:						
Little Rock	4,262	5,134	1,429	1,791	653	877
District of Columbia:						
Washington	33,831	41,866	12,083	14,536	-----	-----
Florida:						
Jacksonville	4,662	5,176	1,624	1,889	690	790
Key West	2,739	2,951	928	1,061	277	321
Pensacola	2,810	2,939	993	1,118	381	415
Georgia:						
Atlanta	12,400	15,717	4,539	5,673	1,094	1,240
Augusta	7,108	8,797	2,613	3,121	692	945
Columbus	3,526	4,501	1,316	1,647	484	726
Macon	4,995	6,210	1,816	2,175	229	292
Savannah	10,493	12,485	3,328	4,177	620	822
Kentucky:						
Louisville	13,348	15,324	4,291	4,836	2,154	2,675
Lexington	3,915	4,632	1,427	1,517	395	502
Louisiana:						
Baton Rouge	3,118	2,916	1,041	1,094	105	114
New Orleans	28,636	35,727	9,946	11,852	2,595	2,785
Shreveport	3,486	4,054	1,256	1,495	198	214
Maryland:						
Baltimore	29,165	38,131	8,595	11,999	3,073	3,676
Mississippi:						
Meridian	2,324	2,858	990	1,123	211	275
Natchez	2,210	3,083	887	1,060	329	421
Vicksburg	3,139	4,070	1,099	1,368	313	473
Missouri:						
Kansas City	7,053	6,842	1,897	2,208	948	1,162
St. Louis	13,247	13,819	3,978	4,399	2,449	2,573
North Carolina:						
Charlotte	2,280	2,860	888	1,084	257	335
Newbern	2,305	2,966	939	1,049	-----	-----
Raleigh	3,396	2,955	1,130	1,054	633	742
Wilmington	5,070	6,225	1,899	2,152	594	693
South Carolina:						
Charleston	14,187	16,849	4,877	5,729	1,094	1,390
Columbia	4,366	4,424	1,512	1,609	362	505
Tennessee:						
Chattanooga	6,599	5,976	2,019	2,129	897	1,066
Knoxville	3,101	3,328	1,012	1,190	346	434
Memphis	13,333	15,396	4,231	5,091	-----	-----
Nashville	13,334	16,061	4,852	5,518	1,189	1,577
Texas:						
Dallas	4,114	3,947	1,341	1,436	400	500
Galveston	3,063	3,702	1,013	1,323	392	459
Houston	4,792	5,587	1,619	2,125	644	776
Virginia:						
Alexandria	2,393	2,720	975	1,015	383	378
Danville	2,382	3,159	878	1,140	401	409
Lynchburg	4,048	5,758	1,593	2,182	680	993
Norfolk	7,506	8,748	2,293	2,811	513	745
Petersburg	5,409	6,815	2,052	2,441	769	1,055
Richmond	14,216	18,138	4,852	6,300	2,110	2,858
Total	334,433	397,990	111,074	134,689	30,758	37,623

This table shows the excess of colored females in the Southern cities which contained in 1890 more than 5,000 colored inhabitants. There is an excess of 63,557 colored females, who are in the majority in all the cities named except Baton Rouge, La., Chattanooga, Tenn., Raleigh, N. C., Kansas City, Mo., and Dallas, Tex. The preponderance of men in these cities can be explained on the ground of special industrial conditions. It is known that there is great demand for colored male labor in the works of Chattanooga; and the excess in Kansas City can be accounted for by the fact that the males outnumber the females generally throughout the Western country. The relative excess of females of school age can not be

wholly accounted for by industrial conditions, and is a phenomenon which still awaits an explanation. That there should be 63,000 more females than males in the population at large, or 119 females to every 100 males, is surely a less striking phenomenon than that for ages between 5 and 20 the ratio should be 121 to 100. When the school attendance is considered the disproportion is still more glaring, there being 122 females to every 100 males. These figures should be studied in the light of proportion rather than as absolute numbers. The figures relative to a few cities are not given. For example, the census does not give the pupils for the city of Washington, whose numbers would have much weight on the general result; but it is also probable that the omitted figures bear about the same disproportion as those which are presented, so that the value of the table is not affected by their omission.

The female excess for the 11 cities which contained in 1890 a colored population of more than 20,000 is here presented:

Excess of colored females over males.

City.	Colored males.	Colored females.	Excess of females.	Number of females to 100 males.
Baltimore	29,165	38,131	8,966	131
Richmond	14,216	18,138	3,922	128
Atlanta	12,400	15,717	3,317	127
Washington	33,831	41,866	8,035	123
New Orleans	28,936	35,727	6,791	123
Nashville	13,334	16,061	2,727	120
Charleston	14,187	16,849	2,662	119
Savannah	10,493	12,485	1,992	119
Memphis	13,333	15,396	2,063	115
Louisville	13,348	15,324	1,976	115
St. Louis	13,247	13,819	572	104
Total	196,490	239,513	43,023	121

This table bears out the general tendency. There are 121 females to every 100 males, the total excess of females being 43,023. This surplus would form a city as large as Jersey City, N. J.

Such a disproportion in the population makes an unsatisfactory condition of society. But it presents a problem with which the schools must grapple. This is especially significant as applied to industrial education. These girls must become wage-earners. The investigations of the Atlanta conference showed that a large per cent of negro homes were supported wholly or in part by female wage-earners.¹ The preponderance of the female sex renders their participation in wage-earning pursuits inevitable. There is practically but one field open for them, and that lies in the sphere of the household industries. When we speak of industrial education, reference is usually had to work in wood or metal or training in some manly vocation; but the city negro presents a unique industrial problem. The negro male has no fixed industrial status. The trade organizations exclude him from participation in the higher mechanical pursuits. There is no assurance that any considerable number could find means of plying their trades, even if they were equipped with them. It is true that the spirit of trades unionism is fiercest in the North, but there seems to be no doubt that the same policy will be adopted in the South whenever the exigencies of industrial rivalry make it necessary. The whites belong to the preferred class, and the negro is forced out of any pursuit which they wish to occupy themselves. This unpleasant, though stubborn, fact renders a programme of profitable industrial training for the city negro very difficult to formulate.

¹ Bulletin Labor Bureau, No. 10, p. 267.

On the other hand, the colored woman holds undisputed sway in the field of domestic service, and nothing but her own incompetence can ever dislodge her. This affords one of the chief means of support of negro families, more than half of whom subsist in whole or in part by such service. The industrial education of the city negro must take cognizance of these facts and should be shaped largely to the requirements of domestic economy and household industries.

The negro pupil should be taught a knowledge of the conditions and circumstances of his race. As he must live the life conditioned by his race, his training should give him some adequate notions about that life. The German, the Irishman, the Scandinavian, or any other element of our cosmopolitan population need not of necessity study the status of their racial stock. What to them may be a matter of sentiment or pride, to the negro is a stern necessity. They are not compelled to live the life of their race unless they elect to do so. They are eligible to become at once full-fledged American citizens, without any hyphenated prefix. But not so with the negro. He can not escape the onus of his race. Mr. Douglass used to say that wherever the negro goes he carries himself with him. Every person who is tainted with his blood is circumscribed and conditioned by that fact. If it is the function of education to teach the pupil to enter upon the life which lies before him, should not the negro pupil be taught something of that life of which he must ever form a part? The American pupil is instructed in the history, institutions, and traditions of his country, in whose economy he must soon take his place. The negro is an American, but he is none the less a negro. Unlike the Jew, who of his own choice prefers to cling to the traditions of his fathers, the negro has little opportunity of gaining accurate or beneficial knowledge of his race through personal and domestic channels. His main reliance here, as in all other relations, must rest in the schools.

The ordinary text-books that treat of ethnological topics are often humiliating to his pride and revolting to his sense of self-respect. A hideous picture of an African savage and some reference to a domesticated race are about all he can hope to find about himself in the ordinary text which is placed in his hands. Whatever is creditable to the negro is merged in the credit of the general population, while the odious and repugnant stand out in bold relief. Some special corrective influence is necessary in order that the negro may not despise himself, for no class of people who despise themselves can hope to gain the respect of the rest of mankind. While he is feasting upon the fruits of the tree of knowledge, he should beware lest he should be eating and drinking unto his own damnation. It is folly to feed the intellect and starve the spirit. The negro child has a right to know of the contributions and achievements of his race, however insignificant these may appear in the eyes of his white neighbor. "These little things are great to little men." Inspiration is a more valuable function of education than information. Youth are inspired to noble endeavor mainly by the deeds of those of their own kind and condition.

It is indeed true that a people may become too painfully self-conscious. This will make them too proud and elated or too abject and mean. The negro whose time is spent in lachrymal lamentations over the woes and miseries of his race would not make an ideal citizen. The colored boy or girl, on the other hand, who grows up ignorant of the special condition of the class to which he is relegated would be as deficient in practical knowledge as the American youth who knows nothing of the history, institutions, and laws of his country. No negro can afford to be incurious as to the status of his race. It would be as great a manifestation of folly as it would be on the part of a convict to attempt to ignore the fact that he is in durance vile.

Wherever separate schools exist—and the fact of their existence is the most persuasive argument that the negro is shut in to a racial circle and range—there should be some definite instruction in subjects that pertain to the race. Of course,

there should be the highest prudence and caution in the selection of subject-matter and in the manner of impartation. All frictional and inflammatory methods should be discarded, and only subjects that are accurate, comprehensive, and sensible should find favor. There might be placed in parallel columns wrongs suffered and benefits received, rights withheld and duties neglected, present proscription of privilege and the larger promise of the future.

We have in the city negro a special educational problem of peculiar importance. The entire negro population must look to the cities for diffusion of light. The perfection of their educational régimes, therefore, is not only of prime importance to the 700,000 therein collected, but also to the 8,000,000 who are scattered abroad.

PART II.—THE HIGHER EDUCATION OF THE NEGRO.

I. THE INTELLECTUAL CAPACITY OF THE NEGRO.

The negro is scarcely ever considered with reference to the primary problems of life. Those needs of the human race which do not depend upon temporary conditions and circumstances are not generally deemed predicable of him. The African is not regarded in his own right and for his own sake, but merely with reference to the effect which his presence and activity produce upon the dominant Aryan. He is merely a coefficient which is not detachable from the quantity whose value it may either increase or diminish. The black object is always projected against a white background, producing a grotesque and gloomy silhouette. The whole history of the contact of the races deals with the negro as a satellite whose movements are secondary to those of the central orb about which it revolves. Civilization was not thought possible for the sons of Ethiopia. The sable livery of the Tropics was deemed impervious to ennobling influences. The negro could only contribute to the wants and welfare of the higher race. With a self-debasement surpassing the vow of the anchorite, he was expected to bow down to this white god and serve him, ascribing unto him "the kingdom, the power, and the glory, forever." The whole scheme of the subjugation and oppression of the African is based upon the theory that the negro represents an inferior order of creation, and therefore his needs are secondary to and derivable from those of his white lord and master. The ordinary attributes and susceptibilities of the human race were denied him. When it was first proposed to furnish means for the development of the nobler side of the negro race, those who possessed the wisdom of their day and generation entertained the proposition either with a sneer or with a smile. Ridicule and contempt have characterized the habitual attitude of the American mind toward the negro's higher strivings. The African was brought to this country for the purpose of performing manual labor. His bodily powers alone were required to accomplish this industrial mission. No more account was taken of his higher susceptibilities than of the mental and moral faculties of the lower animals. The white man, as has been wittily said, saw in the negro's mind only what was apparent in his face—"darkness there, and nothing more." His usefulness in the world is still measured by physical faculties rather than by qualities of mind and soul. Even after the wonderful transformations of the past thirty years, many claim to discern no function which he can fill in society except to administer to the wants and wishes of others by means of bodily toil. The merciless proposition of Carlyle, "The negro is useful to God's creation only as a servant,"¹ still finds wide acceptance. It is so natural to base a theory upon a long-established practice that one no longer wonders at the prevalence of this belief. The negro has sustained servile relations to the Caucasian for so long a time that

¹ Occasional Discourses on the Nigger Question.

it is easy, as it is agreeable to the Aryan pride, to conclude that servitude is his ordained place in society.

As the higher susceptibilities of the negro were not needed, their existence was, at one time, denied. The eternal inferiority of the race was assumed as a part of the cosmic order of things. History, literature, science, speculative conjectures, and even the holy Scriptures were ransacked for evidence and argument in support of this theory. It was not deemed inconsistent with divine justice and mercy that the curse of servitude to everlasting generations should be pronounced upon a race because their alleged progenitor utilized as an object lesson in temperance the indulgent proclivity of an ancient patriarch.¹ Science was placed under tribute for support of the ruling dogma. The negro's inferiority was clearly deducible from physical peculiarities. In basing the existence of mental, moral, and spiritual qualities upon the shape and size of skull, facial outline, and cephalic configuration, the antinegro scientists outdistanced the modern psychologists in assuming a mechanical equivalent of thought.

But in spite of scientific demonstration, learned disquisitions, prohibitive legislation, and alleged divine intendment, the negro's nobler nature persisted in manifesting itself. The love, sympathy, tender fidelity, and vicarious devotion of the African slave, the high spiritual and emotional fervor manifested in the weird wailings and lamentations of the plantation melodies, the literary taste of Phillis Wheatley, the scientific acumen of Benjamin Banneker, the persuasive eloquence of Frederick Douglass, were but faint indications of smothered mental, moral, and spiritual power. The world has now come to recognize that the negro possesses the same faculties, powers, and susceptibilities as the rest of mankind, albeit they have been stunted and dwarfed by centuries of oppression and ill usage. The negro, too, is gradually awakening to a consciousness of this great truth. The common convergence of religious and secular thought is toward the universal fatherhood of God and brotherhood of man. This universality of kinship implies commonality of powers, possibilities, and destiny. It is difficult to estimate the importance of this belief to the backward races of the earth. We have of late heard a strangely discordant jangle from the jungles of India, with contemptuous reference to "lesser breeds without the law." Rudyard Kipling regards all other races of the earth only as contributory factors to the glory of his own. This conviction is betrayed even in what he intends for a kindly reference:

But the things you will learn from the yellow an' brown,
They'll 'elp you and 'eap you with the white.²

The backward races, according to this new light of Asia, have no inherent capacities, rights, or prospects, but are merely a part of the "white man's burden," a load more grievously to be borne than the weight which mythology assigned to the back of the ill-fated Atlas. But this note is strangely discordant to the prevailing sentiment of the opening century. How much broader in comprehension, truer in prophecy, and nobler in sympathy and spirit are the lines of Walt Whitman:

A man's body at auction!
(For before the war I often go to the slave mart and watch the sale.)
I help the auctioneer, the sloven does not half know his business.
Gentlemen, look on this wonder!
Whatever the bids of the bidders, they can not be high enough for it.
For it the globe lay preparing quintillions of years without one animal or plant.
For it the revolving cycles truly and steadily rolled.
In this head the all-baffling brain.

* * * * * *
Examine these limbs, red, black, or white, they are cunning in tendon and nerve,
* * * * * *

¹ Genesis, IX: 21-27.

² Seven Seas, p. 171.

Exquisite senses, life-lit eyes, pluck, volition,

* * * * *

And wonders within there yet.

Within there runs blood,

The same old blood! the same red running blood!

There swells and jets a heart, there all passions, desires, reachings, aspirations,

(Do you think they are not there because they are not expressed in parlors and lecture-rooms?)

This is not only one man—this the father of those who shall be fathers in their turns,

In him the start of populous states and rich republics,

Of him countless immortal lives with countless embodiments and enjoyments.¹

It is a matter of prime importance for the negro to feel and to convince his fellow-men that he possesses the inherent qualities and therefore the inherent rights that belong to the human race. Carlyle, though blinded by narrow prejudice when handling the negro in the concrete, is nevertheless a true philosopher when dealing with general principles. The same author who regards the negro as an "amiable blockhead," and amenable only to the white man's "beneficent whip," also exclaims, "that one man should die ignorant who had the capacity for knowledge, this I call a tragedy, were it to happen more than twenty times in a minute."² When it is granted that the negro has capacity for knowledge and virtue, all of his other problems flow as corollaries from the leading proposition.

The lack of capacity on the part of colored youth to secure the higher lines of education has, until recently, in this country at least, been generally assumed. The few negroes who showed any intellectual development during slavery days were exceptions, sufficient only to prove the rule. It used to be an accepted dictum that the negro's skull was too thick to learn. This dictum, however, seems to have been founded upon a desire rather than a belief; for in order to justify the assertion laws were made forbidding the attempt. It was made a crime for the negro to perform the impossible. Why reenact the laws of God?

It will be noticed that those who deny the negro mental capacity may fairly be suspected of a motive. This was certainly true in the case of the slaveholders before the war. It is equally true in certain quarters to-day. Men will resort to all kinds of arguments in order to shape their consciences to their dealings. All the resources of knowledge were exhausted to show that the negro was not like other men, and that God had designed him for an inferior station in life. All this was undertaken to justify the system of slavery, or, slavery being dead, to shut out the negro from the full privileges of manhood and citizenship. It is easy as it is safe to shift responsibility from men's guilty consciences and place it upon divine intentment. The process was a logical and a cunning one. Admit the negro's mental and moral endowments and all justification for inhuman, unfair, or proscriptive treatment falls to the ground.

If I'm designed yon lording's slave,

By nature's law designed;

Why was an independent wish

E'er planted in my mind?³

John C. Calhoun was by all odds the most sagacious defender of slavery. He placed its justification squarely upon the ground of the negro's intellectual and moral inferiority. He is reported to have said that if he could find a single negro who understood the Greek syntax he would regard the race as human and worthy to be treated as men.⁴ This statement sounds very remarkable in the light of

¹ Leaves of Grass, p. 85. ² Sartor Resartus (Helotage). ³ Robert Burns's Man was Made to Mourn.

⁴ On account of the importance and widespread currency of this statement, I deem it advisable to give here an account of its origin.

The late Rev. Alexander Crummell, founder and first president of the American Negro Academy, gives the following account:

In the year 1833 or 1834, the speaker (Rev. Alexander Crummell) was an errand boy in the

subsequent developments. If Mr. Calhoun could be reincarnated and could visit his old alma mater at New Haven, he would undoubtedly change his opinion. This remarkable statement should serve to make us heedless of all sweeping denunciations and hostile generalities against the race, however arrogantly they may be put forth or with however high authority they may be supported.

The mental capacity of the negro with reference to this higher education gives rise to two distinct questions: (1) Can he master and assimilate the branches usually placed in the college curriculum? and (2) is he equal in capacity to the white man?

The first proposition needs no argument. Nobody whose opinion is worth quoting doubts at this late date that the negro can master the higher branches of European learning and interpret them in thought and action. Whoever affects to doubt it himself needs to be pitied for his incapacity to grasp the truth. The only excuse for introducing this proposition is that it was at one time denied.

Duty depends upon and is proportionate to ability. Even though it be shown that the white man has larger gifts of mind than the negro, that does not relieve the latter from the duty of cultivating his mind by means of higher education. If the Russians should find that they are intellectually inferior to the Germans, would that make it any the less incumbent upon Russian youth to cultivate their minds to the highest possible degree? The possessor of one talent is called upon to make returns as well as the holder of ten. It is only the sloth who hides his talent in the earth because he imagines that somebody else has a larger allowance. The claim for the higher education of colored youth is not based upon relative capacity, but upon their ability to profit by it. There is a principle in mechanics that no more work can be gotten out of a machine than power is put into it. The problem of machinery is to so adjust force and friction as to bring out the largest possible fraction of useful work. The analogy applies with much strength to the case in hand. It is not attempted to create capacity. God alone can do that. But the problem is how can we best prepare the negro to do the work before him and that, too, with the capacity with which God has endowed him. The wisdom of mankind has decided that the best preparation for any serious duty is a careful training and discipline of the mind.

Although the relative capacities of the races can not be decided by arrogant assertions on the one hand and indignant denials on the other, nevertheless it is a matter of much speculative interest. Affirmation is worth no more than denial, and continued asseveration on either side is worth little more than a spirited contest of "did" and "didn't" between two pugnacious boys.

It will take ten generations to decide this question. The intellectual ascendancy of the various races and tribes is subject to strange variability. The Egyptian, the Jew, the Indian, the Greek, the Roman, the Arab, and the modern European has each had his turn at intellectual domination. When the early nations were at the zenith of art and thought and song, Franks, Britons, and Germans were roaming through dense forests, groveling in subterranean caves, practicing barbarous rites, and chanting their horrid incantations to savage gods. In the days of Aristotle the ancestors of Sir Isaac Newton and Kent and Gladstone could not count beyond the ten fingers. Tacitus tells us that the British youth were incapable of learning music and philosophy.

antislavery office in New York City. On a certain occasion he heard a conversation between the secretary and two eminent lawyers of Boston—Samuel E. Sewell and David Lee Child. They had been to Washington on some legal business. While at the capital they happened to dine in the company of the great John C. Calhoun, the Senator from South Carolina. It was a period of great ferment upon the question of slavery, State's rights, and nullification; and consequently the negro was the topic of conversation at the table. One of the utterances of Mr. Calhoun was to the effect that if he could find a negro who knew the Greek syntax he would then believe that the negro was a human being and should be treated as a man. (American Negro Academy, Occasional Papers, No. 3, pp. 10-11.)

To affirm that all races are equal in intellectual capacity is a rather hazardous proposition. There is not wanting, however, eminent authority to support it. Leaving this broad proposition untouched, let us now deduce some of the arguments which support the negro's claim to intellectual capacity.

1. Within the limits of the white race there is the widest possible divergence of mental capability. A philosopher and an idiot may not only be members of the same race, but of the same family. Such divergence is equally true of the negro race. No intellectual classification is possible which will put all whites in one class and all blacks in another. Some negroes are unquestionably superior in intellectual endowment to most white men.

2. Where mixed schools exist there is no discoverable difference of capacity or aptitude on the part of the pupils of the two races. This phenomenon has manifested itself not only in the case of the negro in the United States, but it is equally true of the children of all the so-called inferior races who have been brought in intellectual competition with Caucasian children. It has been observed, however, and remarked upon by Herbert Spencer, that the children of weaker races do not continue their mental activity after reaching maturity with the same vigor as their white competitors. This inactivity is clearly due to a lack of stimulus and incentive and not to incapacity.

3. Colored students pass through Northern colleges with success and sometimes with distinction. Their average rank is exceptionally high when we consider their early environments and opportunities. From time immemorial negro students from Africa, Haiti, South America, and the islands of the sea have passed through the universities of Europe. This occurrence is so common that it no longer excites remark.

4. The race has produced from time to time individuals who show unmistakable evidences of the highest susceptibility of mind. Such instances are so numerous that it would be invidious to mention a few of them, not being able to mention all.

5. Of the numerous authorities that might be quoted in this connection I will cite only a few. William Matthews, LL. D., one of the most successful American authors, in discussing negro intellect, says:

We affirm that the inferiority of the negro has never been proved, nor is there any good reason to suppose that he is doomed forever to maintain his present relative position, or that he is inferior to the white man in any other sense than some white races are inferior to others.¹

Benjamin Kidd, author of *Social Evolution*, says:

The children of the large negro population in that country [United States] are on just the same footing as children of the white population in the public elementary schools. Yet the negro children exhibit no intellectual inferiority; they make just the same progress in the subject taught as do the children of the white parents, and the deficiency they exhibit in later life is of quite a different kind.²

Prof. N. F. Shaler, of Harvard University, dean of the Lawrence Scientific School, writes in the *Arena*:

There are hundreds and thousands of black men in this country who in capacity are to be ranked with the superior persons of the dominant race, and it is hard to say that in any evident feature of mind they characteristically differ from their white fellow-citizens.³

The following citations from the highest academic authority furnish valuable testimony as to the negro's intellectual capacity:⁴

¹ *North American Review*, July, 1889. ² *Social Evolution*, p. 295. ³ *Arena*, December, 1890.

⁴ These citations are taken from *The College-Bred Negro*, p. 31 et seq. The *College-Bred Negro* appeared as *Atlanta University Publications*, No. 5, and contains the fullest extant historical and statistical account of the negro's higher educational efforts. Dr. W. E. B. Du Bois is secretary of the Atlanta conference, and the success of this work is due largely to his efforts.

From the University of Kansas we learn (January, 1900):

I am pleased to state that this year we have twice as many colored students in attendance at the university as ever before; in all, 28. The rule is that no student shall be allowed to take more than three studies. If he fails in one of the three, it is a "single failure;" in two of the three, a "double failure." The latter severs the student's connection with the university. There are 1,000 students in attendance at the present time. The semiannual examination was held last week, and as a result there are 200 "single failures" and 80 "double failures." The gratifying part of it is that not one of the colored students is in either number.

The secretary of Oberlin writes (February, 1900) in sending his list: "It is a list containing men and women of whom we are proud."

Colgate University, New York, writes of a graduate of 1874 as "a very brilliant student," who "was graduated second best in his class. It was believed by many that he was actually the leader."

A graduate of Colby College, Maine, is said by the librarian to have been "universally respected as a student, being chosen class orator."

Wittenberg College, Ohio, has two colored graduates. "They were both bright girls and stood well up in their respective classes."

A negro graduate of Washburn College, Kansas, is said by the chairman of the faculty to be "one of the graduates of the college in whom we take pride."

The dean of the faculty of Knox College, Illinois, writes of two negro students—Senator Bruce, of Mississippi, and another—who graduated and were remembered because of "their distinguished scholarship."

A black student of Adrian College, Michigan, "was one of the best mathematicians I ever had in a class," writes a professor.

Adelbert College, of the Western Reserve University, Ohio, has a negro graduate as acting librarian who is characterized as "one of the most able men we know;" while of another it is said, "We expect the best."

Lombard University, Illinois, has "heard favorable reports" of its single negro graduate.

The dean of the State University of Iowa writes (December, 1899) of a graduate of 1898:

He distinguished himself for good scholarship, and on that ground was admitted to membership in the Phi Beta Kappa Society. He is a man of most excellent character and good sense, and I expect for him a very honorable future. He won the respect of all his classmates and of the faculty. As president of the Phi Beta Kappa Society, I received him into membership with very great pleasure as in every way worthy of this honor.

Boston University writes of one graduate as "a fine fellow." He is now doing postgraduate work at Yale, and the agent of the Capon Springs negro conference writes (November, 1900) "I continually hear him mentioned in a complimentary way. On the other hand, two negro boys were in the freshman class not long ago, and both were conspicuously poor scholars."

Otterbein University, Ohio, has a graduate who "was a most faithful and capable student."

The dean of Dartmouth College, New Hampshire, writes (December, 1899) of its graduates:

The last two or three are hardly established in business yet, but the others are doing remarkably well. These men have been in each case fully equal to if not above the average of their class. We have been very much pleased with the work of the colored men who have come to us. They have been a credit to themselves and their race while here and to the college since graduation. I wish we had more such.

The president of Tabor College, Ohio, says of two colored graduates: "They are brainy fellows who have done very much good in the world."

One of the most prominent colored Methodist ministers in Philadelphia said to the president of Allegheny College, Pennsylvania, speaking of a colored graduate: "Any college may be proud to have graduated a man like him."

The University of Idaho graduated in 1898 a young colored woman of "exceptional ability."

Westminster College, Pennsylvania, has graduated two negroes. "Both were excellent students and ranked high in the estimation of all who knew them."

Of a graduate of Hamilton College, New York, the secretary says:

He was one of the finest young men we have ever had in our institution. He was an earnest and consistent Christian, and had great influence for good with his fellow-students. No one ever showed him the slightest discourtesy. On leaving college he spent three years in Auburn Theological Seminary; was licensed to preach by one of our Northern presbyteries, and then went to Virginia, near Norfolk, where he built a church and gave promise of great usefulness, when, about two years ago, he suddenly sickened and died. He had many friends in Clinton outside of the college. He prepared for college in the Clinton Grammar School. On leaving the school for college the wife of the principal of the school made to me the remark that it seemed as if the spirit of the Lord had departed from the school. I received him into the church and was his pastor for a number of years. Everybody was his friend. Members of the Presbyterian Church of Clinton contributed to the erection of his church in Virginia, and the Sunday school has educated his sister. His untimely death caused deep sorrow in this community, where he was greatly beloved. We felt that he was destined to become a power for good among his people in the South.

At the larger colleges the record of the negro students has, on the whole, been good. At Harvard several have held scholarships, and 1 a fellowship; there has been 1 Phi Beta Kappa man, 1 class orator, 2 commencement speakers, 3 masters of art, and 1 doctor of philosophy. In scholarship the 11 graduates have stood: 4 good, 3 fair, 2 ordinary, and 2 poor.

At Brown one of the most brilliant students of recent years was a negro; he was among the junior 8 elected to the Phi Beta Kappa.

At Amherst the record of colored men has been very good, both in scholarship and athletics. A colored man captained the Amherst foot-ball team one year and is now one of the chief Harvard foot-ball coaches.

At Yale and Cornell colored men have held scholarships and some have made good records.

But, say the objectors, if the negro possesses this great capacity of mind, why has he not given the world the benefit of it during the course of history? By their fruits ye shall know them. Mr. Thomas Nelson Page, in his otherwise delightful book on the Old South, asks with supercilious disdain: "What of value to the human race has the negro race produced? In art, in mechanical development, in literature, in mental and moral science, in all the range of mental action, no notable work has up to this time come from a negro."¹ Henry Ward Beecher's sneer against the negro race is a hackneyed recital, viz, that "If all the negroes in the world were sunk to the bottom of the ocean, the bubbles that would come to the top would be of as much benefit to civilization as the bodies that went down."

Mr. Thomas Nelson Page and Mr. Beecher make the mistake of confounding intellectual capacity with intellectual activity. Capacity is potential and not kinetic energy. Whatever native energy the mind may possess, it must receive reinforcement from the prevailing tone of society before it can show any large results. In arithmetic a figure has an inherent and a local value, the latter being by far its more powerful function in numerical calculations. So it is with intellectual achievements. The individual mind may count for much, but the tone of society counts for more. It is absolutely impossible for a Bacon to thrive among barbarians or a Herbert Spencer among Hottentots.

In confirmation of this view let us for a moment follow the career of the Greeks, who were undoubtedly the most intellectual people that ever lived.

Mr. Lecky tells us in his *History of European Morals*:

I regard it as one of the anomalies of history that within the narrow limits and scanty population of the Greek states should have arisen men who in almost

¹ The Old South, p. 314.

every conceivable form of genius, in philosophy, in ethics, in dramatic and lyric poetry, in written and spoken eloquence, in statesmanship, in sculpture, in painting, and probably also in music, should have attained almost or altogether the highest limits of human perfection.¹

Mr. Galton, in his *Hereditary Genius*, tells us:

We have no man to put beside Socrates and Phidias. The millions of all Europe breeding, as they have done, for the subsequent two thousand years have never produced their equals. It follows from all this that the average ability of the Athenian race is, on the lowest estimate, very nearly two grades higher than our own; that is, about as much as our race is above that of the African negro.²

These remarkable statements are supported by the highest possible authority, and yet this intellectual race, this race of Phidias and Plato, of Homer and Socrates, has continued for two thousand years in a state of complete intellectual stagnation. In the words of Macaulay, "Their people have degenerated into timid slaves and their language into a barbarous jargon."³

Can there be any stronger proof of the fact that intellectual activity depends upon the environing stimulus, political and social stability, and not upon capacity?

It is often said that no negro has written a book fit for a white man to read. In so far as this is true, it grows out of the fact that the negro has not had favorable intellectual environment. The Dumas, père and fils, have laid the world under a debt of literary gratitude, but they did not write as colored men. They were not hindered by the environments of that race.

Our own country has not escaped the odium of intellectual inferiority. The generation has scarcely passed away in whose ears used to ring the standing sneer: "Who reads an American book?" It was in the proud days of Thomas Jefferson that a learned European declared: "America has not yet produced one good poet, one able mathematician, one man of genius in a single art or science." In response to this charge, Jefferson offers an eloquent, special plea. He says:

When we shall have existed as a people as long as the Greeks did before they produced a Homer, the Romans a Virgil, the French a Racine, the English a Shakespeare and Milton, should this reproach be still true, we will inquire from what unfriendly cause it has proceeded.⁴

How analogous to this is the reproach which Mr. Page hurls against the negro race! Let the negro shield himself from the reproach of Page under the plea of Jefferson.

Quoting again from Dr. Matthews's contribution to the *North American Review*:

Hardly two centuries have passed since Russia was covered with a horde of barbarians, among whom it would have been as difficult to find any example of intellectual cultivation and refinement as at this day to find the same phenomenon at Timbuctoo or among the negroes of Georgia or Alabama.

But subsequent events have shown that the Russians are in no wise inferior to any other European race.

It is an evident fact that the thought, the culture, and progressive spirit of our country is confined chiefly to certain sections and localities. According to Henry Cabot Lodge's *Distribution of Ability in the United States*,⁵ Massachusetts has contributed more stars to the galaxy of America's intellectual greatness than all the South and West combined, leaving out the single State of Virginia. Would it be fair, therefore, to assert that an inhabitant of Georgia or Illinois is God-ordained to be intellectually inferior to a native of Massachusetts? The difference in age, wealth, culture, and refinement of the communities accounts for the disparity in the results. The negro claims the benefit of the same argument. He

¹History of European Morals, vol. 1, p. 418.

²Hereditary Genius, p. 331.

³Macaulay's Essays (Mitford's History of Greece).

⁴Jefferson's Notes on Virginia.

⁵The Century, September, 1891.

has never, during the whole course of history, been surrounded by those influences which tend to strengthen and develop the mind. It takes long generations of culture and leisure to produce the best results in scholarship and learning. The negro may not be expected to equal James Russell Lowell in letters, or Bancroft in history, or John Fiske in philosophy until the community in which he lives, as well as the special society to which caste assigns him, has developed a corresponding intellectual tone.

The intellectual equality of the sexes has recently gained many advocates, and yet, in all the list of civilized years, the feminine sex has contributed to history scarcely a single name of the first degree of luster. The explanation is offered that their energies have been directed along other lines of endeavor, and that they have not been competing for intellectual distinction. It would be as unfair to upbraid them for not reaching intellectual heights after which they have not been striving as it would be to chide them for not shining on the field of military renown. The cause of woman and the contention of the negro have many interesting parallels, but none more striking than the common argument which they advance to account for the lack of superior intellectual manifestations.

Leaving the speculative question in abeyance, it can certainly be said that history fails to reveal any people who, under such adverse circumstances of heredity and environment, have ever equaled the negro in the exuberance of intellectual qualities.

II. THE NEED OF THE HIGHER EDUCATION.

Culture, like virtue, is its own reward. It needs no vicarious excuse. The possession of a faculty justifies the development of it. The negro needs the higher education because, as was shown in the first section, he is susceptible of the culture which it affords. Civilization is due to the evolutionary process and grows by slow and imperceptible stages. Each generation does not begin its acquisitions *de novo*, but starts with the inheritance of all that has gone before. It must, however, take some time to digest and assimilate its inheritance. Suppose each generation had to rediscover for itself the propositions of Euclid, the state of mathematical learning would always remain in its infancy. This principle is equally true of a race which has recently entered the arena. The eleventh-hour adventurer enters into equal enjoyment with those who have borne the heat and burden of the day. No greater mistake can be made than to suppose that the colored race must pass through every variety of physical and mental vicissitude which the Caucasian race has undergone before it can attain like renown. This erroneous supposition lies at the basis of much of the opposition to the higher education of colored youth. Civilization was not an original process with any race known to history. The torch is handed down from age to age and gains in brilliancy as it goes. A race can not lift itself independently into civilization any more than a man can sustain himself by pulling against the straps of his own boots. The negro, as much as any, can boast, in the lines of Tennyson, "I, the heir of all the ages, in the foremost ranks of time."¹ Other men have labored, and he has entered into their labors. In order for the negro to assimilate the civilization into which he has been suddenly thrust, he must contemplate its highest models and latest forms.

It is said that the negro is a great imitator. This is a compliment rather than a reproach, provided only that he imitates the purest, the loftiest, and the best. The wearisome repetition of the slow steps and stages by which present heights have been attained is impossible and absurd. It will be readily agreed that language is the surest measure and gauge of a civilization. Wherever the language of a people prevails, their customs, laws, and institutions are sure to follow. Would anyone argue, therefore, that because the negro is a new creature in modern civilization

¹ Locksley Hall.

he must follow the course of historical development in the employment and use of English speech? That he must dwell for generations upon Anglo-Saxon forms and Chaucerian diction before he is prepared for the language of Gladstone and Lowell? Such questions need no answer. Whites and blacks have the same linguistic needs. They study the same forms of language and strive alike for excellence in syntax and diction, in spoken and written style. What has been said of language applies with equal force to all the complex elements of modern life. The higher education is the gateway to the best that civilization has to offer.

Civilization may be defined as the sum total of those influences and agencies that make for knowledge and virtue. This is the goal, the ultima thule, of all human strivings. The essential factors of civilization are knowledge, industry, culture, and virtue. Knowledge comprehends the facts and truths of the universe; industry embodies them in concrete form; culture leads to rational enjoyment; virtue preserves and makes eternal. The African was snatched from the wilds of savagery and thrust into the midst of a mighty civilization. He thus escaped the gradual process of evolution, and education must span the gap. Education must accomplish more for a backward people than it does for those who are in the forefront of progress. It must not only lead to the unfoldment of faculties, but must fit for a life from which the recipient is separated by many centuries of development. The fact that a backward people are surrounded by a civilization which is so far in advance of their own is by no means an unmixed advantage. In the tempestuous current of modern life the contestant must either swim on the surface or sink out of sight. He must either conform or succumb to the inexorable law of progress. The African chieftain who would make a pilgrimage from his native principality to the city of Washington might accomplish the first part of his journey by the original mode of transportation—in the primitive dugout and upon the backs of his slaves—but he would complete it upon the steamship, the railway, the electric car, and the automobile. How swift the transformation, and yet how suggestive of centuries of toil, struggle, and mental endeavor. It required the human race thousands of years to bridge the chasm between savagery and civilization; but now it must be crossed by a school curriculum of a few years' duration. The analytic process is always more rapid than the synthetic. The embryologists tell us that the individual, in developing from conception to maturity, must pass in rapid succession through all the stages traversed by the race in its struggle upward. We are also informed that social evolution must take a somewhat similar course. The European child is supposed to absorb the civilization of his race in about twenty-five years of formative training. The negro is required to master, *de novo*, the principles of civilization in a similar and, indeed, in a shorter time.

In a settled state of society education is conservative rather than progressive in its main feature. Its chief function is to enable the individual to live the life already attained by the race. The initiative of progress is reserved for the few choice spirits of the human race. The bulk of any people can only live up to the level of their social medium, and can be uplifted only by social impulses imparted by some powerful personality. It is a wise provision of nature that large bodies move slowly, otherwise they would acquire dangerous momentum. The progress of the race must be provokingly slow as compared with that of the individual. Education prepares for a statical rather than a dynamical condition of society. And yet, notwithstanding these stern truths, every educated negro must be a reformer, a positive, aggressive influence, in uplifting the masses, and that, too, in spite of the fact that he belongs to a backward breed that has never taken the initiative in the progressive movements of the world. He must therefore be aroused to a consciousness of personal power, the energy of the will, the individual initiative, that subtle, indefinable quality which has always exerted a control-

ling influence upon human affairs, in spite of the theories of doctrinaires and the formulas of philosophy.

The first great need of the negro is that the choice youth of the race should assimilate the principles of culture and hand them down to the masses below. This is the only gateway through which a new people may enter into modern civilization. Herein lies the history of culture. The select minds of the backward race or nation must first receive the new cult and adapt it to the peculiar needs of their own people. Did not the wise men of Greece receive the light from Egypt? The Roman youth of ambition completed their education at Athens; the noblemen of northern Europe sent their sons to the southern peninsulas in quest of larger learning; and up to the present day American youth repair to the European universities for a fuller knowledge of the culture of the Old World. Japan looms up as the most progressive of the non-Aryan races. This wonderful progress is due in a large measure to their wise plan of procedure. They send their picked youth to the great centers of Western knowledge; but before this culture is applied to their own needs it is first sifted through the sieve of their native comprehension. The graduates of the higher schools of learning and other institutions are forming centers of civilizing influence in all parts of the land, and we confidently believe that these grains of leaven will ultimately leaven the whole lump.

That mere contact with a race of superior development can not of itself unfold the best possibilities of a backward people is a proposition which, I think, no student of social phenomena will be inclined to dispute. For four hundred years the European has been brought in contact with feebler races in all parts of the world and, in most cases, this contact has been as the blighting finger of death. Nowhere do we find a single instance in which a people has been lifted into civilization thereby. Outward conformity may be enforced by a rigid discipline; but outward forms and fair practices are of little or no avail if the inward appreciation be wanting. Civilization is a centrifugal and not a centripetal process. It can not be injected hypodermically. Healthy growth can not be secured by feeding a child when he is not hungry or by forcing upon him a diet which he can neither digest nor assimilate.

Aside from political ambition and commercial exploitation, the chief motive of the European in treating with feebler races has been to civilize and enlighten them. The conversion of the Indian to the Christian faith was the chief motive assigned for the early colonization of America, and yet the influence of such schools as Hampton and Carlisle has, perhaps, done more to uplift the red man than all of the contact with the white race since Columbus first planted his Catholic cross in the virgin soil of a new world. Indeed, the superficial, the frivolous, and the vicious qualities are most easily communicable. The substantial qualities of mind and soul can only be developed by independent activity.

For four centuries the Portuguese have been touching the life of the east coast of Africa with their missionary propagandism, commercial enterprise, and governmental policy, but, according to the highest testimony, they have made no more abiding impression on the life of that continent than one might make upon the surface of the ocean with the dent of his finger.

The negro has now reached a critical stage in his career. The point of attachment between the races which slavery made possible has been destroyed. The relation is daily becoming less intimate and friendly and more business like and formal. It thus becomes all the more imperative that the race should gain for itself the primary principles of knowledge and culture. Civilization can not be imparted by attrition, but is the unfolding of the seed whose potency is in itself.

It becomes all the more needful for the negro to pursue the higher lines of education, because this is the principal avenue of refining influence now open to him. There is no long line of ancestors to inspire to noble thoughts or deeds. The

present basis of society does not admit the negro to close social and personal touch with the best forms of culture and refinement. Just as it is more needful for the crude rustic lad to study English syntax than it is for the son of a refined family who gains facility of speech by familiarity and use, so it becomes all the more necessary for the colored youth of crude antecedents and environments to gain culture and refinement through the medium of the school.

That servile and domestic contact has greatly benefited the race, at least so far as outward conformity and the graces of life are concerned, can not be doubted. This kind of contact served its purpose in its day, but its spirit is repugnant to the instincts of manhood. Slavish conformity growing out of favor or fear is not the kind of development that makes men. The helping hand that is most helpful must not be inclined downward, but stretched out on the horizontal. The alarm is sounded that as the negro is being freed from the restraining influence of the master class he is, in some localities at least, relapsing into barbarism. The fact is, slavery has never lifted them much above that deplorable state. The boasted benefits of slavery are superficial, not real. It reminds one of induced electricity, that lasts only so long as the inducing influence is present. Slavery can not elevate a people. The real uplifting influence has been the schoolhouse and the college. These are to become more and more effective as the other influences are removed.

Another great need of the race, which the schools must in a large measure supply, is self-reliant manhood. Slavery made the negro as dependent upon the intelligence and foresight of his master as a soldier upon the will of his commander. He had no need to take thought as to what he should eat or drink or wherewithal he should be clothed.

Knowledge necessarily awakens self-consciousness of power. When a child learns the multiplication table he gets a clear notion of intellectual dignity. Here he gains an acquisition which is his permanent, personal possession and which can never be taken from him. It does not depend upon external authority; he could reproduce it if all the visible forms of the universe were effaced. They say that the possession of personal property is the greatest stimulus to self-respect. When a man can read his title clear to earthly possessions, it awakens a consciousness of the dignity of his own manhood. And so when one has digested and assimilated the principles of knowledge he can file his declaration of intellectual independence; he can adopt the language of Montaigne: "Truth and reason are common to everyone and are no more his who spake them first than his who speaks them after; 'tis no more according to Plato than according to me, since he and I equally see and understand them."¹

Primary principles have no ethnic quality. We hear much in this day and time of the white man's civilization. We had just as well speak of the white man's multiplication table. Civilization is the common possession of all who will assimilate and apply its principles. England can utilize no secret process of art or invention that is not equally available to Japan. We reward ingenuity with a patent right for a period of years upon the process that has been invented; but when an idea has been published to the world it is no more the exclusive property of the author than gold, after it has been put into circulation, can be claimed by the miner who first dug it from its hiding place in the earth. No race or nation can preempt civilization any more than it can monopolize the atmosphere which surrounds the earth or the waters which hold it in their liquid embrace.

In passing through the streets you may notice a young man accommodate his companion with a light from his cigar. After the spark has once been communicated the beneficiary stands upon an equal footing with the benefactor. In both cases the fire must be continued by drawing fresh supplies of oxygen from the atmosphere.

¹ Essay on the Education of Children.

From whatever source a nation may derive the light of civilization, it must be perpetuated by the exercise of its own faculties. All of the visible forms of civilization have been dug out of the ground. We boast of our towns and cities, of our steamships and railways, and of the mighty works of art and invention, but the voice of time is ever whispering, "Dust thou art, to dust returnest." But after all these shall have crumbled into dust, the ingenuity of man will be able to produce mightier works than those that perished. Mind and matter are the irreducible elements. Mind is the common heritage of man, and matter is indestructible.

The negro race has not yet directed its energy to the solution of primary problems. It has been content to receive the crumbs that fall from the white man's table.

Several years ago I received from my florist a fine rosebush that had been grafted upon a Manetti stem, with instructions that the Manetti must be buried out of sight and that its shoots must be pinched back as fast as they appeared above the ground. The strength which its hardy roots derived from the soil was to be diverted from the natural course of developing the plant itself and infused into the more lordly rose, thus insuring greater vigor of growth and brilliancy of bloom. I was forcibly reminded of the analogous situation of the negro in the industrial world. While the race has, in a sense, been dealing with industrial first principles, it has, nevertheless, served only a vicarious purpose. The negro has been suppressed below the social surface, and wherever an individual emergence appeared it was forthwith pressed back to the common level. The substance which his sinews derived from the soil went to enrich, adorn, and glorify another race. But now, under the guidance of intelligence, the substance of his toil must be utilized to promote his own growth and expansion. "Each plant must grow from its own roots" is the botanical equivalent of the old mechanical adage, "Every tub must rest on its own bottom."

The negro race hitherto has been as the vine, which must cling to the tree or trail in the dust; but now it must imitate the oak, which gains independence of foothold and dignity among its rivals of the forest by sending its roots into the soil and expanding its foliage upon the happy air. It is knowledge that must rouse the negro to self-conscious activity.

Whatever system of education is good for Anglo-American youth is good also for Afro-American youth, who have to confront the same issues, and that, too, under much severer conditions. White youth, fortified and reenforced as they are by every advantage of opportunity and environment, find it necessary to pursue the higher education in order to equip themselves for the duties of life which lie before them. Should colored youth be less well prepared? Are their tasks any less difficult? Do the problems that await them call for an inferior order of ability or tact? The arbiter of success is a cruel master, reaping where he has not sown, gathering where he has not strewn, demanding fruit in abundance where he has not planted the seed of advantage. The stream of modern competition is a tempestuous current. The contestant must either swim on the surface or sink out of sight. The world in its cruel demands will accept no excuse. It makes little or no allowance for a man because his ancestors lived under a vertical sun. If you can not do the world's work, it will say to you, if it is in the humor to stop long enough: "'Tis true 'tis pity; and pity 'tis 'tis true," and pass on to some one who can. Men demand the best services available for their needs. No one is willing to trust his life in sickness, his cause in litigation, nor yet his moral and spiritual needs to half-trained or incompetent hands. That the higher education increases the efficiency of service goes without saying. If it is believed that the negro race is doomed to everlasting servility, and that its ordained mission is to hew wood and carry water, then discouragement of higher education is consistent. If all the ennobling vocations are to be filled by white men only and menial stations

assigned to the negro, then his higher culture is a delusion and a snare. But if the negro has wrapped up in him all the possibilities of humanity, he should prepare himself for the larger responsibilities.

Again, the class of men who justify human degradation has not yet passed away. Great learning and scholarship have always been employed against the negro. Men of great ingenuity and mental cleverness have always been arrayed against human rights. History, anthropology, ethnology, and the whole range of the inexact sciences, from which men derive the doctrines they are looking for, have been ransacked for testimony against the African. Our magazines frequently startle us with some amazing article, from authority of high repute, tending to degrade and belittle the race. Scholarship must be combated with scholarship. The situation calls for negroes who shall be able to accept the challenge on any plane and to meet and match the adversary in deep research, in logical acumen, in persuasive rhetoric, or disquisitional skill.

The work of educated colored men is largely that of leadership. They require, therefore, all the discipline, judgment, and mental balance that long preparation can afford. The more ignorant and backward the masses, the more skilled and efficient should the leaders be. It is easier to lead a trained army than a mob of raw recruits, ignorant of the discipline and tactics of war. It requires less wisdom to direct those who need no guidance than to control those who do not know their intellectual right hand from the left. It must be remembered, too, that the matters in which the negroes are to be directed are of the highest importance. It requires high qualification to deal wisely with finance, economics, and the general matters of government and state. But does it not require superior wisdom to deal wisely with human hopes and destiny? No man or set of men can be too learned or too profound into whose hands are committed the temporal and eternal welfare of a people.

Leaders will arise whether qualified or not. If the blind lead the blind all will land in the ditch. Who does not know of the harm which such leaders have inflicted by their rash judgment and ill-advised counsel? It is not contended that a college education makes a man a leader or that a lack of liberal culture disqualifies him for useful service. America has produced scores of men of the highest renown who were not the product of the schools. There are negroes, not a few, who are doing valiant service for the race by means of their virile common sense and untutored energy. Far be it from me to detract one iota from their usefulness or dim the luster of their renown. But when all that has been claimed is conceded the balance of advantages will be found on the side of culture. The whole trend of liberal learning is toward noble manhood and exalted service. The situation is too serious, the crisis too critical, to neglect any means whereby help might come.

In selecting the choice youth of a backward race and giving them a liberal education as the best means of preparing them to uplift their own people, we are only following ancient precedent. The Hebrews labored under disadvantages remarkably similar to those of the American negro. God's idea of a leader was a man identified in blood and sympathy with the downtrodden races, who should be learned in all the wisdom of his day and generation. He must be able to cope with the wisdom of Pharaoh's court. It seems that in ancient as in modern times learning frequently arrayed itself on the side of arrogance and oppression. Moses, in order to succeed in his mission, must match the wisdom of Egypt in logical argument, in persuasive speech, and in the manifestation of magical power. If the wise men of the Nile could perform wonders, he must do mightier works than these. His serpent must swallow up the rest. The culture of Moses, however, was of the greatest service to him in leading the undisciplined hosts through the wilderness and in laying the foundation of their national and permanent greatness. Can we not learn lessons from history? Although under the

present circumstances a single commanding leader is almost or altogether impossible, nevertheless the same principle holds now as then. There is no doubt that there were to be found both Egyptians and Hebrews who decried giving a Hebrew youth an Egyptian education, on the ground that it unfitted him for his place and made him think that he was as good as Egyptians.

It was the common practice of Rome to select the most promising youth of the provinces and give them a complete education in order that they might disseminate an uplifting influence among their own people. To-day the Japanese send their choicest youth to the universities of Europe and America as the best means of transplanting Western civilization to oriental soil. It is the highest ambition of missionaries in all parts of the world to send the best specimens of the native youth to the home country to take on the higher education and bring back the good influence to their own race. It will be noticed that in all these cases it is the higher education that is sought for—the highest that the recipient will take. The select negro youth of this country have as much need to absorb the higher culture and disseminate the beneficial influence throughout the race. This race needs teachers, preachers, physicians, and lawyers, aggregating more than 50,000, all of whom will be the better prepared for their functions by the higher education, or at least by a flavor of its influence. The higher education tends to develop superior individuals who may be expected to exercise a controlling influence over the multitude. The individual is the proof, the promise, and the salvation of the race. The undeveloped races, which in modern times have faded before the breath of civilization, have perished probably because of their failure to produce commanding leaders to guide them wisely under the stress and strain which an encroaching civilization imposed. A single Indian with the capacity and spirit of Booker T. Washington might have solved the red man's problem and averted his impending doom.

The contention among scholars as to what place the classical or dead languages should occupy in a system of education is of much general interest. The friends of liberal learning need to stand firm against all short cuts to culture and the mad rushes after practical results. It is the part of wisdom for the educators of colored youth to adhere to the orthodox standards of culture approved by long centuries of trial and usage. The safest road to culture runs through Greece and Rome. "From thence," says Macaulay, "have sprung directly or indirectly all the noblest creations of the human intellect." It is especially necessary for colored youth to acquire acquaintance with classical institutions and life. The negro borrows his civilization from those who borrowed in their turn. A recent writer argues:¹

It is quite important that the higher education of the negro should include Latin and Greek. The Anglo-Saxon civilization in which he lives is a derivative one, receiving one of its factors from Rome and the other from Athens. The white youth is obliged to study the classic languages in order to become conscious of these two derivative elements in his life, and it is equally important for the colored youth. A liberal education by classic study gives the youth some acquaintance with his spiritual embryology.

The belief that a sound scholastic education will enable the negro to discriminate between the real things of life and the superficial appearances is clearly set forth in the following citation:

They say that egotism and self-conceit are characteristic of the African race, and especially the Afro-American of academic training. You will have to deal with a population that places a premium upon bombastic display and a discount upon unpretentious merit. You should devote your powers to the masses to uplift them and not to exploit them for your vainglory and unrighteous self-aggrandizement. It is said that a native African struts proudly when decorated with flaming European neckwear of the latest Parisian pattern, though he wear

¹ W. T. Harris in *Atlantic Monthly*, June, 1892.

not a single other article of dress. Men cross the seas, and even go to college, without changing their natures. Witness those Afro-Americans who decorate themselves with the highest-sounding literary and scholarly degrees, making heavy demands upon the alphabet to express them, without a single other item of intellectual adornment to support this gaudy display. Reprobate all such childish infirmity. It will only make you ridiculous in the eyes of sensible men. Be natural. Be simple. "Be whatever you may, but yourself first." Do not impose cheap and shoddy standards upon the masses, but teach them to appreciate the noblest and the best. Grasp the real things of life rather than the superficial and showy. It is perfectly natural for a people who are rapidly acquiring civilization, and in whom the faculty of imitation is strong, to be captivated by the superficial aspect of things, to grasp after the frith and froth rather than the life-giving liquid upon which it floats. If a wild man from Borneo should plunge into the gayeties of the European capitals, should become initiated into the latest style of dress and forms of fashionable display, he might vainly flatter himself that he had leveled the immense lift between savagery and civilization, totally oblivious of the fact that he is separated from that life whose forms he slavishly imitates by ten centuries of solid development. It is true that other men have labored and you have entered into their labors, but you must prove your right to this inheritance by striving to comprehend its inner spirit and meaning, and to unravel its secret and method. I have said that your education has brought you in touch with the fundamental things of life. Return ever and anon to these first principles as your standards and data of reference. In Greek mythology we learn that Antæus, the giant, in wrestling with Hercules, received new vigor whenever he touched his mother earth; but Hercules, discovering the secret of his strength, lifted him into the air and squeezed him to death in his herculean grasp. I advise you to make sure of the firmness and fixture of your foothold in the basis of solid things for fear that you be lifted into the delusive realm of unreal allurements and be intoxicated by the frivolous demigod of this unsubstantial region.¹

In the same discourse it is also shown that a knowledge of the laws of growth of human institutions will give the negro a larger patience with the temporary ills of his lot.

Do not waste time complaining against the existing order of society. Enter a manly protest against all forms of wrongs and injustice, but do not pass your days in wailful lachrymations against the regulations of a civilization whose grandeur you have done nothing to make and whose severities you are doing nothing to mollify. Leave that to the ignorant demagogue. Bring your knowledge of history and of human nature to bear upon the situation. I have already pointed out to you that the adjustment of man's relation to man constitutes one of the primary problems of life. Where this adjustment is complicated by diverse physical peculiarities and by different inherited or acquired characteristics the problem becomes one of the greatest intricacy that has ever taxed human wisdom and patience for solution. Race prejudice is as much a fact as the law of gravitation, and it would be as suicidal to ignore the operation of the one as that of the other. Mournful complaint is as impotent as an infant crying against the fury of the wild wind. History has taught you that the path of moral progress has never taken a straight line, but has ever been a zigzag course amid the conflicting forces of right and wrong, truth and error, justice and injustice, cruelty and mercy. Do not be discouraged, then, that all the wrongs of the universe are not righted at your bidding. The great humanitarian movement which has been sweeping over the civilized world from the middle of the eighteenth century to the present time, manifesting itself in political revolutions, in social and moral reforms, and in works of love and mercy, affords the amplest assurance that all worthy elements of the population will ultimately be admitted to share in the privileges and blessings of civilization according to the measure of their merit.²

One of the chief functions of higher education for the negro is to stimulate his industrial energies.

Many able and earnest advocates of the negro's cause seem to have lost the power of binocular vision and have become one-eyed enthusiasts over a narrow feature. The two forms of education are not antagonistic, but supplemental; the one applies to the few, the other to the many; the one supplies the motive, the other the method. The negro needs, first of all, lofty ideals. The surest way to

¹ Address to graduating class, Howard University, June, 1898, by Kelly Miller, p. 10.

² *Ibid.*, p. 11.

induce a people to provide for the material needs of life is to teach them that "life is more than meat." In order that the negro may feel a zest for work and enter into the joy of service he must have prospect and vista.

The day laborer pursues the mechanical rounds of his stupid toil, conscious only of the fact that "time and hour run through the whole day." Under a more enlightened view he would be inspired and sustained by the anticipated enjoyment of the fruits of toil. The negro lacks enlightened imagination. While slavery inculcated the regular habit of labor, it held out no incentive beyond the master's crib. The negro does not make provision because he lacks prevision. The prayer "Give us this day our daily bread" to him has a material and literal significance. The industrial incapacity of the negro is due largely to the fact that he has been confined to the low grounds of drudgery and toil without being permitted to so much as cast his eyes unto the hill of aspiration and promise. "The man with the hoe" is of all men most miserable, unless, forsooth, he has also a hope; but if he be imbued with the spirit of hope and promise he can wield the hoe with as much zest and satisfaction as any other instrument of service.

It is true that a people must be rooted and grounded in the concrete principles of things. When a seed is sown in the ground it first sends its roots into the soil, but only that it may rise out of it, so as to bring forth foliage and flower and fruit in the air above. The incentive to noble endeavor comes from a rational conception of the true end of existence. We can not reach the sky on a pedestal of brick and mortar, and all attempt to do so must end in bewilderment and confusion, as it did on the plains of Shinar in days of old. Even the builders of the tower of Babel derived their inspiration from above. They were inspired by the conceit that they were descended from the skies, and sought by mechanical contrivance only to regain the blissful seat. The negro needs a wider and a larger range of vision. He can not see beyond the momentary gratification of his desires. He does not look before and after. The most effective prayer that can be uttered for him is, Lord, open Thou his eyes. Such influences can be brought to him by means of the higher culture only.

Prof. Booker T. Washington is the greatest man which the race, under freedom, has produced. But his success is due wholly to his intellectual and moral faculties—his enlightened mind, consecrated zeal, and persuasive ability. The mastery of a hundred handicrafts would add nothing to his usefulness or power. Those leaders who have been most effective in guiding, directing, and controlling the life, in stimulating the lethargic energies, and in quickening the zeal of the masses, have derived their inspiration, either directly or indirectly, from contact with higher culture. This is true of Douglass, the orator; of Washington, the educator, and of Dunbar, the poet. The architect must plan before the artisan can execute. The idea comes from above and descends until it strikes the basis of popular needs, and then rebounds, bringing the concrete fulfillment up toward the level of the ideal from which it sprang.

III. OBJECTIONS TO THE HIGHER EDUCATION OF THE NEGRO ANSWERED.

Of late it has been all but the universal fashion to discourage and discredit the higher education of the negro. So widespread has this spirit become that it is doubtful whether the proposition to afford facilities for the higher education of this class would receive substantial support were it now made for the first time. Indeed, many who were most enthusiastic in making the experiment have become hostile or indifferent in the light of experience.

In the first place, we are told that the cost is out of proportion to the result; that the higher education has been fostered at the expense of primary and industrial instruction, which are more essential in the present state of need. The late Charles D. Warner, who had been a lifelong friend and advocate of the negro's

cause, espoused this view in his last striking public utterance. In his notable address delivered before the American Social Science Association, in 1900, he said:

But the effort at education went further than the common school and the primary essential instruction. It introduced the higher education. Colleges—usually called universities—for negroes were established in many Southern States, created and stimulated by the generosity of Northern men and societies and often aided by the liberality of the States where they existed. The curriculum in these was that in colleges generally—the classics, the higher mathematics, science, philosophy, the modern languages, and in some instances a certain technical instruction, which was being tried in some Northern colleges. The emphasis, however, was laid on liberal culture. This higher education was offered to the mass that still lacked the rudiments of intellectual training, in the belief that education—the education of the moment, the education of superimposed information—can realize the theory of universal equality.

This experiment has now been in operation long enough to enable us to judge something of its results and its promises for the future. These results are of a nature to lead us seriously to inquire whether our effort was founded upon an adequate knowledge of the negro, of his present development, of the requirements for his personal welfare and evolution in the scale of civilization, and for his training in useful and honorable citizenship. I am speaking of the majority, the mass to be considered in any general scheme, and not of the exceptional individuals—exceptions that will rapidly increase as the mass is lifted—who are capable of taking advantage to the utmost of all means of cultivation, and who must always be provided with all the opportunities needed.

Millions of dollars have been invested in the higher education of the negro, while this primary education has been, taking the whole mass, wholly inadequate to his needs. This has been upon the supposition that the higher would compel the rise of the lower with the undeveloped negro race as it does with the more highly developed white race. An examination of the soundness of this expectation will not lead us far astray from our subject.¹

This is not saying that the higher education is responsible for the present condition of the negro. Other influences have retarded his elevation and the development of proper character, and most important means have been neglected. I only say that we have been disappointed in our extravagant expectations of what this education could do for a race undeveloped and so wanting in certain elements of character, and that the millions of money devoted to it might have been much better applied.²

Dr. G. A. Alderman, president of Tulane University, New Orleans, has quite recently claimed that the money contributed to negro education by Northern philanthropy has been, for the most part, literally wasted.³

These views have been assigned to these distinguished persons rather for the sake of definite location than for the weight of personal authority, for they represent stock assertions which have gained much headway by persistent asseveration. And yet, when we look the facts squarely in the face, the charge that the money spent on the higher education of the colored race has been wasted or even misapplied is indeed a remarkable one.

Does this charge come from the South? When we consider that it was through Northern philanthropy that a third of its population received its first impulse to better things; that these higher institutions prepared the 30,000 negro teachers whose services are utilized in the public schools; that the men and women who were the beneficiaries of this philanthropy are doing all in their power to control, guide, and restrain the South's ignorant and vicious masses, thus lifting the general life to a higher level and lightening the public burden; that these persons are almost without exception earnest advocates of harmony, peace, and good will between the races, to say nothing of the fact that these vast philanthropic contributions have passed through the trade channels of Southern merchants, it would seem that the charge is strangely incompatible with that high-minded disposition and chivalrous spirit which the South is so zealous to maintain.

¹ Education of the Negro, by Charles Dudley Warner, pp. 4-5.

² Ibid., p. 12.

³ Independent, September 5, 1901.

Does this charge come from the North? It might not be impertinent to propound a few propositions for consideration.

Is it possible to specify a like sum of money spent upon any other backward race which has produced greater results than the amount spent upon the Southern negro? Is it the American Indian, upon whom four centuries of missionary effort has produced no more progress than is made by a painted ship on a painted sea? Is it the Hawaiian, who will soon be civilized off the face of the earth? Is it the Chinese, upon whom the chief effect of Christian philanthropy is to excite them to breathe out slaughter against the strangers within their gates? It is incumbent upon him who claims that this money has been wasted to point out where, in all the range of Christian activity, the contributions of philanthropy have been more profitably spent.

Those who disparage the higher education because it has not banished ignorance and poverty and obliterated vicious tendencies are too impatient. If it takes twenty-five years to educate a white boy, it must require an incalculably longer period to educate a black race. It is true that \$40,000,000 or \$50,000,000 have been already contributed by philanthropy for the education of the negro. This is about equal to the biennial expenditure of the city of New York for educational purposes. And yet, if we are to believe the reports of the low state of municipal morality and the rumors of corruption and wrongdoing, we see that education has by no means done its perfect work in our national metropolis. Then why should we rave at the heart and froth at the mouth because a sum of money scarcely equal to the biennial educational cost of a single American city, when scattered over a territory of a million square miles and distributed through a period of thirty years has not completely civilized an undeveloped race of some ten million souls?

The American people must yet learn to apply the simple principles of political economy to the race problem. A dollar contributed by philanthropy is not necessarily any more efficacious than one appropriated out of the public treasury. Money devoted to the education of the black race need not be expected to yield any greater return, either of knowledge, virtue, or practical capacity, than a like sum devoted to the white race. Although the Southern States have contributed to the full amount of their ability, it is still true that the combined contributions of Northern philanthropy and Southern statesmanship have been woefully inadequate to the task imposed. Fifty millions of dollars is indeed a princely sum, but on examination we find that it would not average one dollar a year for each negro child to be educated. Why should we marvel, then, that the entire mass of ignorance and corruption has not put on enlightenment and purity? We should be patient with the slow evolution of social forces. The human race makes very slow progress toward the goal of righteousness. After the lapse of nineteen centuries of Christian endeavor the curse of sin is still in the world. It is no marvel, then, that the negro has not put on the perfect dress of civilization and righteousness because exhorted to do so in proverb and psalm.

Wisdom is justified by her children. As an illustration of the value of the higher education to the negro race, I point to Howard University, which is the largest and best equipped institution of its class. The establishment and maintenance of this institution during the past thirty-four years has cost between \$2,000,000 and \$3,000,000. As the returns on this investment, it has sent into the world, in round numbers, 200 ministers of the gospel, 700 physicians, pharmacists and dentists, 300 lawyers, and 600 persons with general collegiate and academic training, together with thousands of sometime pupils who have shared the partial benefits of its courses. These graduates and sometime pupils are to be found in every district and county where the negro population resides, and are filling places of usefulness, honor, and distinction, as well as performing works of mercy and sacrificial service for social betterment. Not a half dozen of the entire number have a criminal record. They serve as an inspiration and a stimulus,

quicken the dormant energies of the people and urging them to loftier ideals and nobler modes of life. It devolves upon the complainant to present some plan by which a like sum of money, in a like space of time, can be expended so as to produce a more wholesome or more widespread effect upon the general social uplift.

Another potent objection against the higher education is that it has not checked the evil disposition and vicious tendencies of the race. Prof. John Roach Straton, in the *North American Review*, sets forth this view with much erudition and argumentative skill.¹ As this phase of the question has never had a more learned or effective advocate, it seems well to consider at length the arguments which Professor Straton advances.

In the first place, he contrasts the present criminal status of the race with its moral behavior under the régime of slavery.

Several weighty considerations must have escaped the author while he had this topic under discussion.

Slavery did not improve the moral nature of the negro, but merely compelled outward conformity by physical force. If convicts in prison are well behaved, it is from physical necessity and not from moral choice. Herein lay the chief evil of slavery. It suppressed overt manifestations of wrongdoing, but did not implant the corrective principle. When the physical restraint was removed there was no corresponding moral restraint to take its place. It was inevitable that when let loose this pent-up momentum would expend itself in wild license and excessive indulgence. It is manifestly unfair to compare the behavior of the race under freedom of action and liberty of choice to its conduct when under the control of an alien will.

The parallel increase of crime and intelligence is not peculiar to the negro, but is a common phenomenon of the country at large. "After the war the education of the negro began and rapidly advanced, but side by side with it has gone his increase in crime and immorality in even greater ratio."² If the author had left out the word "began" and substituted "the American people" for "the negro" in this recital, he would have told the whole truth and not merely a disjointed fragment, to the disadvantage of a discredited class.

The negro constitutes the lower stratum of society, where the bulk of crime is always committed. His social degradation is the greatest factor contributive to his high criminal record. If corresponding social classes among the whites could be segregated for the sake of comparison, equally damaging conclusions would doubtless be revealed. The foreign element of our cosmopolitan population shows a much higher criminal average than the native whites, because they represent a lower social stratum, and they have not yet become adjusted to their new environment. Both of these arguments, with intensified force, apply to the case of the negro. The polished granite may look with contempt upon the rough and uncut stone buried beneath the mud and mire, but its lordly eminence is due to the unseemly foundation which it affects to disdain. The amplest proof that the criminal record of the negro race, alarming though it be, is not due to inherent trait is furnished by the fact that the presence of a large number of negroes in any community does not increase its total criminal average. While it is true that 12 per cent of the population commit 30 per cent of the crime, does anyone believe that if this 12 per cent were supplanted by a corresponding class of the white race the criminal quality of the whole population would be improved? According to the Eleventh Census the North Atlantic Division of States, in which the negro element constitutes only a slight sprinkling, had 833 prisoners to every million inhabitants; the South Atlantic Division, where the race is densest, had only 831,

¹ *North American Review*, June, 1900. See also Booker T. Washington's reply to Professor Straton, *North American Review*, August, 1900.

² Professor Straton in *North American Review*, June, 1900.

while the Western section, where the negro is a negligible quantity, had 1,300. The same condition of things is revealed if we limit our study to States and municipalities. In 1890 New York had 1,369 prisoners to the million, California 1,703, Alabama 720. According to the police reports of 1896 the percentage of arrests in Boston was 9.37, whereas in Washington, D. C., one-third of whose population is colored, it was only a slight fraction above 8.¹ If it were asked why, according to the revelation of statistics, the white people of the North Atlantic States were not so well behaved as the mixed population of the South Atlantic Division, or why New York and California have a higher criminal record than Alabama and South Carolina, or why Boston has a greater percentage of arrests than Washington, it would be manifestly unkind to attribute the lower ethical average of the higher tier of States to race degeneracy or to superior education.

Professor Straton urges as unassailable proof of his position the fact that the Northern negro is two or three times as criminal as his more unfortunate brother in the South. He fails, however, to make suitable allowance for the restlessness and recklessness due to unsettled conditions. The Northern negro population is recruited very largely by emigration from the South, many of whom leave their homes for reasons best known to the police. He is apt to mistake liberty for license, and to make the largest possible use of his new-found privilege of apparent social equality, which culminates in the dens of vice and crime. The employment of the Northern negro is unsteady and intermittent, affording a wide latitude of idleness, thus giving the evil one his coveted opportunity for mischief. Again, the Northern negro meets with a wider hostile area than his Southern brother, and is more apt to resent insult from the white race. The prejudice in the North is as narrowing and as harrowing as it is in the South, albeit it may reveal itself under a different mode of manifestation. The disparity between profession and performance in the North is as great a provocative as the repressive treatment of the South.

It is useless to attempt to gainsay the alarming criminality of the negro, so far as this can be tested by statistics. The facts presented by Professor Straton are not disputed, only he fails to credit them to the proper account. It is environment, not race; condition, not color; and education, instead of being a contributing factor, as the author avers, is a partial though not a complete deterrent.

Our philanthropists have expected too much from education, especially when it is applied to the negro. It is folly to suppose that the moral nature of the child is improved because it has been taught to read and write and cast up accounts. Tracing the letters of the alphabet with a pen has no bearing upon the golden rule. The spelling of words by sound and syllable does not lead to the observance of the Ten Commandments. Drill in the multiplication table does not fascinate the learner with the Sermon on the Mount. Rules in grammar, dates in history, sums in arithmetic, and points in geography do not necessarily strengthen the grasp upon moral truth. These things constitute the mere mechanics of knowledge. It is only when the pupil begins to feel its vitalizing power that it begins to react upon the life and to fructify in character. While the criminal tendency of the race, so far as it can be tested by the statistician, shows an alarming tendency to increase, it is notable that the products of those schools with prolonged courses of study and continuous discipline have met every expectation from the standpoint of conduct and demeanor. We do not hear one word of criticism as to the behavior of the graduates of Howard, Fisk, Atlanta, Hampton, Shaw, Wayland, and other institutions of rank.

It is sometimes said that the higher education of the negro will carry him beyond his race and make him dissatisfied with his lot. Discontent is a necessary condition of progress. What American is there who is not trying to improve his lot?

¹ See police reports for Boston and Washington, 1896.

Then, why should the negro be satisfied with his, which is the most miserable of all?

If nature intends one for a fool no amount of education can alter the design. Intellectual sham, vainglorious display, and pompous pretense are, unfortunately, unavoidable. This is the fault of too little rather than too much education. The familiar lines of Pope are pertinent:

A little learning is a dangerous thing;
 Drink deep, or taste not the Pierian spring;
 There shallow draughts intoxicate the brain,
 And drinking largely sobers us again.

There is no danger that education will lift the recipient above the needs of humanity. The missionary work among crude and primitive peoples calls for men of the best minds as well as the highest consecration. Jonathan Edwards, who, perhaps, possessed the most philosophical mind that America has yet produced, spent the last years of his life as preacher among the savage Indians. The schooling which leads away from sympathy with the race is a perversion which experience shows to be quite unusual. Prejudice, relentless and cruel as it is at points, is nevertheless not, perhaps, an unmixed evil. It keeps within the race serviceable elements which otherwise would be lost to it. All such volatile elements are thrown back upon the race by the repellent power of prejudice. The attempt to escape is as suicidal as the conduct of the caged eagle which beats its wings to insensibility against the iron bars of its prison house. Give the negro the higher education and his sense of duty and love of humanity will make it effective for the good of his race; or, this failing, a meaner motive necessitated by prejudice will make it available also.

It is assumed that the negroes are leaving the farm and the shop and are rushing in disproportionate numbers to the college and the university. This race is affected with great material and intellectual poverty. After abstracting all who are able to think there will be left sufficient to toil.

The following table taken from the Reports of the Bureau of Education ought to forever silence this assertion:

Number of pupils in secondary and higher institutions in the United States.

1.	2.	3.	4.	5.	6.
Year.	Population.	Number of secondary and higher students.	Same per million of population.	Number of pupils in secondary and elementary public schools.	Percentage of column 3 on column 5.
1879-80.....	50,155,783	218,809	4,362	9,867,505	2.22
1889-90.....	62,622,250	437,303	6,982	12,721,581	3.44
1897-98.....	¹ 72,800,000	752,776	10,342	15,038,636	5.01

THE COLORED RACE.

1879-80.....	6,106,695	7,874	1,289	2,784,709	1.00
1889-90.....	6,954,840	14,538	2,061	1,296,959	1.11
1897-98.....	¹ 7,923,000	17,446	² 2,202	1,506,742	1.16

¹ Estimated.

² Former slave States.

³ 2,517 in 1899-1900.

Mr. A. F. Hilyer, in commenting upon these figures, says:

This table shows that the proportionate number of secondary and higher students to the whole number of children attending school in the United States as a whole had increased from 2.22 per cent in 1879 to 5.01 per cent in 1897, nearly two and one-half times, while the proportion of colored in secondary schools and colleges

had increased very little, indeed, from 1 per cent to only 1.16 per cent, and that now, at the height of all this outcry against any further aid, public or private, for the higher education of colored youth, there is only one-fifth as many colored students in secondary and higher institutions as the average for the United States as a whole. But the story is not yet half told. According to the Report of the Commissioner of Education, 1897-98, volume 2, page 2097, the total number of students taking the higher education in the United States as a whole was 144,477, being 1,980 to each million of the total population. The same Report, page 2480, gives the total number of students pursuing collegiate courses in these much-discussed colleges as 2,492. This is only 310 to the million of colored population; whereas the whole of the United States, as shown above, had 1,980 to the million, nearly six and one-half times as many in proportion to population.

This does not look as though the whole of the colored race is rapidly stampeding to the higher education, or that the labor supply in the Southern States is falling off from this cause. This is an age of higher education for the masses. The increase in the number of students taking the secondary and higher education in the United States during the last ten years has been phenomenal—unprecedented. Is the person of color so much superior to the white that he does not need so much educational training? I think not. In view of the history and present condition of this race the obvious necessity for a large number of educated and trained teachers, ministers, physicians, lawyers, and pharmacists; and in view of the statistical fact that this race has only one-fifth of its quota pursuing studies above the elementary grades, what fair mind will not say there is great need of more of the secondary and higher education for the colored youth instead of less of it?

According to the Report above cited, there are 161 academies and colleges for colored youth in the United States. The total number enrolled was 42,328, of whom 2,492¹ were reported in collegiate grades, 13,669 in secondary grades, and 26,167 in elementary grades. Even in these colored colleges less than 6 per cent of their students are pursuing collegiate courses, and perhaps not more than 2 per cent are pursuing a college course equal to that offered at Howard. Nearly two-thirds of the total enrollment in these colored colleges are receiving elementary instruction in "readin', ritin', and 'rithmetic." Classified by courses of study, 1,711—217 in a million—were taking the classical course; 1,200—150 in a million—the scientific; 4,440—555 to the million—the normal course, preparing for teaching; 1,285—160 in a million—professional courses; 9,724 English, and 244 the business course. In each of these courses the colored race has only about one-fifth or one-sixth of its quota. Is there anything in these figures to alarm the nation?

About one-third of the total number of students in these 161 colored schools and colleges are taking industrial training.² There is surely no need of further proof or assertion on this score.

Again, we hear that higher education for the negro does not solve the race problem. It was a shallow philosophy that predicted this result in the first place. The race problem divides itself into two leading divisions: First, the development of a backward race, and, second, the adjustment of two races with widely divergent ethnic characteristics.

These two factors are in many respects antagonistic to each other. The more backward and undeveloped the negro, the easier is the process of adjustment to the white lord and master, but when you give him Greek and Latin and metaphysics he begins to feel his manhood stirring within him and frictional problems inevitably arise. The good old negro servant, ever loyal and true, is esteemed and honored, but his more ambitious son with a Harvard diploma in his knapsack is persona non grata. Under slavery the adjustment between the races was complete, but the bond was quickly burst asunder when the negro was made a free man and clothed with full civil and political privilege. It would be rather a hazardous statement to affirm that education will solve social and ethnic problems. The development of humanity would be a simple task indeed if a few years schooling could facilitate the adjustment between the European and Asiatic, African and Aryan. The adjustment of peoples, races, and social systems lies in the sphere of statesmanship, philanthropy, and religion.

¹ The investigations of Professor Du Bois show that there can not be more than 1,000 negro students of collegiate grade, according to the average American standard.

² Popular Science Monthly, August, 1900.

The function of education is to develop the faculties of the individual in order to fit him for the life of that society of which he forms a part. The function of the education of the negro is to develop in the individual and in the race the requisite degree of personal and social efficiency. And if it does not eradicate deep-seated prejudices and batter down race and ethnic barriers, it is because the wrong remedy has been applied to the disease. Wise men do not expect to gather grapes of thorns or figs of thistles.

IV.—THE RELATIVE CLAIMS OF INDUSTRIAL AND HIGHER EDUCATION.

Whenever the higher education of colored youth is advocated somebody is sure to suggest industrial training as a counterirritant. The higher and industrial phases of education are not mutually exclusive, and neither can properly be played off against the other. They are both essential to the symmetrical development of any people. Both factors are equally essential to the common product. The one-sided advocates of a particular kind of education for all colored youth remind us of the disputants in rural debating societies who decide, once for all, the momentous question: "Which is the more indispensable element of civilization, fire or water?" The fact is, civilization could not exist without either of these elements, neither can the negro race reach the full measure of development without receiving both kinds of education. It is deemed timely, however, to point out and compare the relative advantages to the negro derivable from industrial training and the higher education, and especially so since the trades school is being prescribed as a panacea for all the ills of the situation, while literary culture is being decried and disparaged. As there are several parties to this contention, it may be well to analyze the motives that give rise to the prevailing preference for industrialism.

1. The vast majority of white people in this country believe that the ordained mission of the negro is to do manual labor—to perform personal and domestic service. This belief is vaguely founded upon a scriptural reference: "Cursed be Canaan; a servant of servants shall he be unto his brethren." The old method of textual interpretation has been superseded by Biblical research and rational criticism. The traditional classification of the human family has been abandoned by most authors of scholarly repute. The Hametic origin of the negro race is accepted by few modern archaeologists, yet the agreeable belief in the ordained servility of the negro still lingers. It was on the basis of this belief that the African was first enslaved. Las Casas, the philanthropic priest, first suggested the enslavement of the African as a means of merciful relief to the poor Indian, who sickened and died in the house of bondage. The negro was brought across the sea to be made a hewer of wood and a carrier of water. Human slavery had a benevolent origin. It was regarded more philanthropic to enslave captives in war than to slay them. But there was not a bit of philanthropy in the establishment of African slavery. It was a business measure pure and simple. The only part of the negro deemed to be valuable was his hands. No account was taken of his mind, his soul, or his all-baffling brain. For well-nigh three hundred years he fulfilled the purpose of his enslavers. Although the civil war overthrew the system of slavery it did not materially alter the minds of the white people as to the negro's place in the social scale. He is still looked upon as a servant whose mission is to minister to the wants of others. Among men of this way of thinking it is easy to gain popularity by advocating industrial training for negroes—any policy that has work for its main object is heartily approved, but the higher education is held up to ridicule and scorn.

2. The second class to this controversy may be called the philanthropists, or those who have a special friendly interest in the colored race. It is this class that has already done so much to rescue the perishing and to lift up the fallen. They

have sent millions of dollars into the South to educate and enlighten the blacks, and have hitherto constituted the leading factor in the upbuilding of the race. It is easy to discern that their sentiment also, during the last few years, is shading toward industrial training, to the disparagement of higher culture. This is easily intelligible. Charity should be applied where it is most needed and where it will reach the largest possible number of the helpless. Its aim is to help those who are lowest in the scale of want and distress. Benevolent people are easily and willingly persuaded that assistance rendered an industrial institution will be more widespread in its application than if given to a college. Colored universities have almost without exception added on industrial courses, largely for the sake of gaining the favor of Northern philanthropists. The literary education of colored youth is so far discredited in the public mind that institutions of higher learning have to attach industrial courses in order to gain financial favor and support. This is practical wisdom, if not pedagogical prudence. Experience bears out the opinion that trades schools and colleges should be maintained as separate and distinct institutions, unless reasons of financial policy suggest otherwise. Blending of the two reminds us of Horace's ridiculous picture with the head of a beautiful woman and the tail of a horrid fish. But, as suggested above, the drift of benevolent sentiment is easy explainable. Charity aims to help the beneficiary to go so far and no farther. We do not aim by charity to lift others into complete equality with ourselves. It is not human nature to assist those whom we deem our inferiors to reach our own plane. The unwritten law of human charity demands that we relieve acute distress when it is easily within our power to do so, but our civilization is not yet sufficiently altruistic to require us to take the unfortunate creatures thus relieved on terms of equality with ourselves. We give a crust to the starving poor. Even Lazarus in the parable fed of the crumbs that fell from the rich man's table. But we do not invite them to attend the banquet which we spread for our friends. Let us marvel not, then, that benevolent friends are ready to assist the negro to a knowledge of letters and the use of tools, but are totally indifferent as to whether or not he studies Greek philology, or the differential calculus. They do not feel any obligation to sustain the beneficiary in those pursuits of truth and beauty which themselves and their children enjoy. A donation to Harvard or Yale can hardly be called charity; it is simply giving on one's own level, to perpetuate one's own name or to advance some favorite idea. But colored schools need not expect gifts of this character from white men; in all such benefactions eleemosynary intent is plainly apparent. Industrial education of the colored race will doubtless continue to be considered of more importance than literary culture by Northern philanthropists, and will continue to receive the bulk of their benefactions.

3. The negro himself is the most interested party to this contention. He bears the same relation to the race problem that a beast does to the burden which has been placed upon its back. How does he think that the youth of the race should be educated? The time has come when the race should do its own original thinking on such vital questions, and not regulate its conduct according to the opinion of white men. However kindly the intentions of the Anglo-Saxon may be, still it seems impossible for him to view the situation under the negro's angle of vision. The sentiment of the white race is well-nigh unanimous that the colored race should confine its energies chiefly to manual and industrial pursuits, and they will make it so in so far as they can control the situation. But the negro can not accept the estimate which the white race places upon him, and consequently must in a large measure reject the treatment prescribed. The sentiment of every self-respecting negro, when clothed in his right mind, must be: "I am a man, and all things which are human appertain to me, although circumstances and environments may hamper me for a season, I will suffer it to be so now, but will relinquish none of the ultimate claims of my species."

There are two leading aims of education: (1) To develop the faculties and powers of the mind, the accomplishment of which is a uniform and invariable process, the same for all minds under all conditions of outward life; and (2) to prepare the individual for the special work which he has to perform; this preparation varies according to environment, opportunity, or the ambition and aptitude of the learner. In any well-regulated community the inhabitants will be distributed among the various industries, trades, and professions according to the needs and opportunities of the community and the capacity, aptitude, and natural bent of individuals. The negro race in this land occupies a peculiar and unique position. The vast majority of them follow agricultural pursuits, domestic service, and other forms of crude, unskilled labor. The number outside of these lines is so small that it would hardly form a homeopathic fraction of the population. They are also the creatures, or rather the victims, of circumstances over which they have no control. In this discussion, then, we are shut up to special circumstances rather than general principles. The unwisdom of an exclusive industrial and mechanical education of the colored race will appear from the following considerations:

1. It would be almost useless to equip a considerable number of colored men with the mechanical trades, for they could find no opportunity to ply them. This is an age of great combinations; both capital and labor are organized and solidified. What the trusts are to capital the trades unions are to labor. Neither the small dealer nor the individual workman can compete with these gigantic monopolies. This is an age in which "the individual withers and the trust is more and more." These trades unions will not admit the negro, in large numbers, on equal terms, and he is absolutely powerless to combat them. They will not combine with him, and he can not compete with them. If any one industrial fact in our history is clearly demonstrated it is that white labor will not compete with black labor. The poor whites of the South, rather than compete with negro labor, betook themselves to the woods, and lived in the mountains and pine thickets in idleness and poverty, constituting that thriftless element known far and wide as "poor white trash." The complaint goes up from all sections of the country that white men are driving negroes out of employments which were hitherto considered peculiarly theirs. It is not because the negro is not a competent and efficient workman in these lines that he is thus supplanted, but it is simply a case of the stronger element driving the weaker to the wall. The Asiatics were excluded from the western coast because they manifested too much skill, thrift, and economy. They were shut out on the plea that competition with them would lower the American white laborer to the level of Mongolian life. The same argument could and would be advanced against the negro. As a further evidence that it is not a lack of skill which renders the negro unable to hold his own in the labor world, he is being crowded out of occupations where no complaint has ever been uttered against his efficiency, and where his supplanters are not more apt or competent than the black competitors. It is a notorious fact that in all the large centers of population positions of waiters, coachmen, and barbers are being filled by white men to the exclusion of his brother in black, or rather, his brother in colors. The competency of the colored waiter has never been questioned. White men do not make more courteous, safe, and reliable coachmen. The whole world acknowledges that the negro is an expert with the razor. The labor wars between the races precipitated in the mines of Tennessee and Alabama and along the levees of New Orleans were not inaugurated because of the inefficiency of colored labor, but because white men wanted the places. It is the policy of most Southern railroads to employ negro firemen, but with the express understanding that they shall never be promoted to positions of engineers. No incapacity is alleged; but white labor zealously guards all such employments against black encroachment.

There was a time when the mechanical work of the South was performed by colored men; but the Northern laborer has gone there and carried his trades unions and his exclusive policy, and the result is the negro is being relegated to the rear. The industrial war has been carried into Africa. It requires no gift of prophecy to predict that in the near future negro mechanics will be as rare in Richmond and Atlanta as they are in Boston and Philadelphia. All will agree that under the present circumstances the negro can not compete with the Anglo-Saxon for political domination; he is equally incapable of sustaining the contest for industrial supremacy. The stronghold of the race hitherto has been its ability to do crude, unskilled work, along lines where white men did not care to compete; to work with the body under a tropical sun where the white man pants for rest and shade. But it has not been able to stand the onward march of skilled labor and machinery. It was announced some time ago that a machine had been invented for picking cotton. An influential Southern journal announced with triumph that the introduction of this invention would settle the race problem for all time. The picture is indeed a dark one. The situation calls for the highest wisdom on the part of negro leaders and the friends of the race. But it is more than foolish to shut our eyes to the facts before us. It is absolute folly to advise remedies which reason tells us in advance can not be effective.

The chief value of the mechanical and industrial schools in the South is that they inculcate in the minds of the crude agricultural population notions of thrift, economy, and decency, and not because they teach the mechanical and scientific trades. Hampton, Tuskegee, and Claflin are among the most useful institutions in America, because their graduates go to and fro throughout the South and carry with them their newly acquired notions of character and life, and disseminate them among the people. They are for the most part engaged in teaching school. I venture the assertion that not one such graduate in ten finds an opportunity to ply the trade which he learned in school. The literary and moral features of their courses are after all of the greatest value. Prof. Booker T. Washington is the most remarkable product of this class of schools. No colored man of his generation has rendered a moiety of the service which he has done in a visible, tangible shape. He is justly accounted one of the great men of America. But the chief element of his success has been his mind, heart, and character, and his unselfish devotion to the welfare of his race. No mere artisan or mechanic could do the work which Professor Washington has done; no, nor 10,000 of them rolled into one. Professor Washington is endowed by nature with splendid mental and moral gifts which he has developed by wide observation and study. He possesses the sagacity to see the needs suggested by special circumstances, and the constructive ingenuity to devise ways of meeting those needs.

2. A supply of labor, skilled or unskilled, can never create a demand for it; but where there is a demand the supply is always forthcoming. Where is the demand for colored mechanics? It certainly is not in the North; it is not in the large cities North or South. There is no considerable demand for colored mechanics in Boston, Philadelphia, Baltimore, or Washington, and I fear not in Richmond, Atlanta, or New Orleans. When there was a demand for such workmen they were always to be found. If there were 5,000 such artisans in Washington City, as skilled as the master workman whom King Hiram sent to Solomon to build the Temple at Jerusalem, they would starve to death under the shadow of the national Capitol for the want of employment. The trades schools may turn out these workmen, but they can not create a demand for them. It is not wise to have in a community a number of men with trades but with no opportunity of plying them; they usually have not the aptitude or willingness to turn to any work except their particular trade, and the last state of the community will be worse than the first. It is often urged as an argument against the negro's higher education that after he has filled

his mind with knowledge he can not find a field in which to use it; but can not this objection be urged, and that, too, with a greater show of probability, against too much industrial training? A trained mind is likely to be more fertile in expedients than a mere "hand;" if it does not find a way it will make one. The one will do with his might what his hands find to do; the other will find with his mind what his hands might do.

3. The educational impulse proceeds from above downward. "*Mens agitat molem.*" I am not arguing, be it borne in mind, against industrial education in its proper place, and under those favorable circumstances where it can be wisely applied; but against the general policy of shutting up the negro to a particular kind of training. It is sometimes objected that the negro race began on top. The top is the natural birthplace of progress. Does Jewish history boast of greater names than Abraham and Moses, the one the founder of the race and the other of the nation? Does not every good and perfect gift come from above? The philosophy of evolution has clearly established a close analogy between the development of organic life and the growth of human society. Even biological progress, it is claimed, is from above downward. Some individual by accident acquires some valuable acquisition to the life of the race, and by a slow process it infiltrates into the life of the species and finally lifts it up to the level of the lucky individual. History reveals the fact that the same law governs the growth of races, states, empire, and republics. It seems as if Providence raises up in the outset some commanding genius so that the common people may have some model to work to. Then why should the negro race not strive to imitate worthy models and lofty ideals? Stimulus can not come from the workbench, the furrow, and the dull routine of daily toil, but must be handed down from "the radiant summit." True, great lights have arisen from lowly occupations, but it was because their avocations could not contain them; they burst their bands asunder and swiftly leaped beyond them. In a certain industrial school which is deservedly famous throughout the country a majority of the instructors in influential positions are college-bred men and women. This is only natural; the educated mind will direct its energies where the need is greatest. All true progress grows out of applying the thought within to the thing without; but the thought is the primary agency, and the outward thing only the object operated upon.

4. The negro is a man and is entitled to all of the privileges of manhood. Why should his education be circumscribed and limited? Why should the larger elements of his nature be left unnurtured, while the mechanical side only is developed? Life is more than meat. As important as the material element is in our civilization, there is danger of pushing it too far. The highest possessions of man do not consist in material wealth. A slaveholder was once asked what was his object in farming. He replied, "I raise corn to raise hogs; I raise hogs to raise niggers; I raise niggers to raise corn." Thus the gross material circle begins and ends in itself. The great evils which confront the negro race are rather of a moral than of a material nature. Truth and justice do not hinge upon industrialism and trade, but are abstract, eternal verities. The negro cries for justice and is offered a trade; he pleads for righteous laws, and is given an industrial school. The case is wrongly diagnosed; the remedy does not apply to the disease. It is sometimes urged upon the negro to get money as the surest means of solving the race problem. Those who argue thus show themselves ignorant of the law of moral reforms. In all the history of the human race, the possession of money has never corrected an evil or righted a wrong. But, on the other hand, it lies at the bottom of most of the ills which our nature is heir to. The greed for gold is the fundamental cause of the negro's misfortune in this land. Will this same love for gold when transferred from the white man to his victim remedy the evil? The accumulation of

evils do not usually counteract, but aggravate each other. The love of money is the root, not the remedy, of all evil. God's truth will not be altered in order to suit the convenience of the negro.

That the negro can have no great industrial future in the large cities, especially where the climatic conditions are such that white men are willing and able to work, has been clearly seen by students of social problems for many years. There are sufficient white men in such communities to perform the skilled mechanical work, and as they belong to the preferred class they will always receive first consideration. They will not combine with the negro, nor are they willing to compete with him on terms of equality. This intolerant policy relegates the negro to those classes of work which white men do not particularly care for.

The negro is excluded not so much because he is black but because he is weak. The same exclusive policy is exercised toward all feeble classes, because there is not enough of the higher lines of work for all of the contestants. The negro is being driven out of his erstwhile industrial strongholds. The colored coachman, barber, waiter, and private domestic is a vanishing quantity in all of the large cities. The white workmen have filled up the ranks of their accustomed vocations and are pushing over the boundaries into the territory occupied by their weaker neighbors. This industrial contest, or rather conquest, is exactly analogous to what is taking place in the political world. As fast as the stronger and more powerful nations have populated their own countries up to the limit of comfortable subsistence, they push over the boundaries into the possessions of the weak, helpless, and feeble races. In sociology, as in physics, when a stronger body comes in contact with a weaker one, the motion of the weaker is reversed and that of the stronger proceeds in the same direction as before, though with a lesser velocity.

It is true that industrial discrimination lies at the base of much of the negro's social degradation. We may say that it is unjust, un-Christian, and unreasonable, but still the fact persists; nor is its force or sanction one whit diminished by the bitter denunciation. The industrial rivalry is fierce and brutal. Kindness is not characteristic of sharp competition. It is an old maxim that business and philanthropy are dissociable. Each competitor is bound to use every advantage at his disposal. To suppose that the white man is going to voluntarily surrender the advantage which his color confers, in order to admit the negro into industrial rivalry on equal footing with himself, is to expect too much of weak human nature. Mankind is not yet sufficiently sanctified for such sublime acts of self-surrender.

Of late we can hear nothing but the hue and cry about the industrial education of the colored race, and, indeed, great good may reasonably be expected to come from this worthy movement. A training in system, order, and method, and a knowledge of how to do things with skill, accuracy, and science will be of incalculable advantage to the possessor in whatever station of life he may be. But who believes that the industrial disadvantages of the negro, in the large cities at least, can be overcome or even materially altered by industrial education? To equip a considerable number of colored boys in Philadelphia, Baltimore, or Washington with the mechanical trades would be simply to furnish them with edged tools without anything to cut.

That form of industrial training which alone offers any considerable relief lies in the field of agriculture and the domestic industries. It is encouraging to note that thoughtful colored people are giving this matter serious attention. The resolution touching this topic, adopted by the Second Hampton Negro Conference,¹ is significant:

¹ Report of Second Hampton Negro Conference.

We call upon our teachers and preachers in the country districts to advise the people to develop the agricultural and industrial resources of their respective communities, and not to be deceived by the glare and glitter of city life. The flocking of the agricultural masses to the cities constitutes one of the great social evils of the period. This evil is especially emphasized in the case of the negro immigrants. They do not form a part of the industrial current and are apt to drift into the alleys and dens of squalor and vice, and their last state becomes worse than their first. On the contrary, every effort should be put forth to induce those who are now in the alleys and byways of the city to seek the country. No one should be encouraged to migrate from the country to the city unless he or she has some definite employment or plan of work previously determined upon.

The negro must dig his civilization out of the ground, as all other races have done. In the country the competition is not so sharp and color forms no barrier. The rain falls and the sun shines on white and black alike. The earth will yield for him just as much as his skill and industry can persuade her to bring forth. Corn and cotton are supremely indifferent to the color of the planter. The markets ask only the quality of the produce and not the color of the producer. He who succeeds in inducing the negroes to work out their industrial salvation in the fertile soil of the South and under conditions with which they are familiar, rather than to rush to the large centers of population, where they have no industrial status, and whose evils they know not of, may truly be denominated their guide, philosopher, and friend. But in every instance it will be found that the wisdom which comes from the higher culture is alone profitable to direct.

V.—THE HIGHER EDUCATION OF COLORED WOMEN.

If the higher education of the colored man seems or seemed ridiculous in the eyes of the wise and prudent, that of the colored woman must appear too absurd for a moment's consideration. The function of the higher culture for the female element of a backward race still waits to be clearly set forth.

The cause of woman in general bears many analogies to that of the negro. They are both characterized by weakness and have had to fight every inch of their way to their present degree of opportunity. All of the arguments which are now being urged against the education of the negro were at one time put forth against the enlightenment of woman. The general attitude on this question at the beginning of the nineteenth century is well expressed in the following citation:

In the very first year of our century, the year 1801, there appeared in Paris a book by Sylvain Maréchal entitled "Shall Woman Learn the Alphabet?" The book proposes a law prohibiting the alphabet to women, and quotes authorities, weighty and various, to prove that the woman who knows the alphabet has already lost part of her womanliness. The author declares that woman can use the alphabet only as Molière predicted they would, in spelling out the verb "amo;" that they have no occasion to peruse Ovid's *Ars Amoris*, since that is already the ground and limit of their intuitive furnishing; that Madame Guyon would have been far more adorable had she remained a beautiful ignoramus, as nature made her; that Ruth, Naomi, the Spartan woman, the Amazons, Penelope, Andromache, Lucretia, Joan of Arc, Petrarch's Laura, and the daughters of Charlemagne could not spell their names; while Sappho, Aspasia, Madame de Maintenon, and Madame de Staël could read altogether too well for their good; finally, that if women were once permitted to read Sophocles and work with logarithms or to nibble at any side of the apple of knowledge there would be an end forever to their sewing on buttons and embroidering slippers.¹

This sounds very much like the objections that used to be put forth, and, indeed, in some quarters are still putting forth, against the higher education of the negro.

There has been a radical change of sentiment on this question during the progress of the nineteenth century. Indeed, this century did more than all the list of preceding years to emancipate the weak and lowly and to place them on equal

¹ A Voice from the South, by Mrs. Anna J. Cooper, pp. 48-49.

footing with the rich in the rivalry of life. Educational facilities have been furnished for women on a scale and schedule approximating those provided for men. In this matter, as in all other phases of human emancipation and broadening of the bounds of opportunity, the United States has taken the leading part and played the most conspicuous rôle. All of this, however, has had reference mainly to the gentler sex of the favored race. But while the showers of blessings were scattering so freely, some of the surplus droppings have fallen even upon the weaker sex of the weaker race. The negro woman represents the most unfortunate class of American womanhood. The mere contemplation of her condition fills the soul with infinite pity. No negro can think of the unfortunate status of the womanhood of his race without feeling the force of the wailful plaint of the prophet of old: "Oh, that my head were waters, and mine eyes a fountain of tears, that I might weep day and night for the slain of the daughter of my people."¹ The sins and weaknesses of both races were and are visited upon her. No one has described the condition out of which negro womanhood sprung with more clearness and accuracy than the late Dr. Alexander Crummell:

In her girlhood all the delicate tenderness of her sex has been rudely outraged. In the field, in the rude cabin, in the press room, in the factory, she was thrown into companionship of coarse and ignorant men. No chance was given her for delicate reserve or tender modesty. From her childhood she was the doomed victim of the grossest passions. All the virtues of her sex were utterly ignored. If the instinct of chastity asserted itself, then she had to fight like a tigress for the ownership and possession of her own person, and oftentimes had to suffer pains and lacerations for her virtuous self-assertion. When she reached maturity all the tender instincts of her womanhood were ruthlessly violated.²

Her home life was of the most degrading nature. She lived in the rudest huts, and partook of the coarsest food, and dressed in the scantiest garb, and slept in multitudinous cabins upon the hardest boards.³

Gross barbarism, which tended to blunt the tender sensibilities, to obliterate feminine delicacy and womanly shame, came down as her heritage from generation to generation; and it seems a miracle of providence and grace that notwithstanding these terrible circumstances so much struggling virtue lingered amid these rude cabins; that so much womanly worth and sweetness abided in their bosoms.⁴

On first view one would say that bringing the facilities for the higher culture within the reach of such a condition is like casting pearls before swine. But it has been abundantly demonstrated that the influence of culture is able to reach and to relieve, even unto the uttermost limit of degradation. The world has probably never witnessed a more heroic struggle than these women, hampered, as it were, with a millstone chained about their necks, have made and are making for virtue, knowledge, and light.

Mrs. Mary Church Terrell, ex-president of the National Association of Colored Women, who is herself a college-bred woman, and whose life adds emphasis and exemplification to her words, says:

Nothing, in short, that could degrade or brutalize the womanhood of the race was lacking in that system from which colored women then had little hope of escape. So gloomy were their prospects, so fatal the laws, so pernicious the customs, only fifty years ago. But from the day their fetters were broken and their minds released from the darkness of ignorance to which for more than two hundred years they had been doomed, from the day they could stand erect in the dignity of womanhood, no longer bond, but free, till now, colored women have forged steadily ahead in the acquisition of knowledge and in the cultivation of those virtues which make for good. To use a thought of the illustrious Frederick Douglass, if judged by the depths from which they have come rather than by the heights to which those blessed with centuries of opportunities have attained, colored women need not hang their heads in shame. Consider, if you will, the almost insur-

¹Jeremiah, ix, 1.

²Africa and America (The Black Woman of the South), p. 64.

³Ibid., p. 65.

⁴Ibid., p. 66.

mountable obstacles which have confronted colored women in their efforts to educate and cultivate themselves since their emancipation, and I dare assert, not boastfully, but with pardonable pride, I hope, that the progress they have made and the work they have accomplished will bear a favorable comparison at least with that of their more fortunate sisters, from whom the opportunity of acquiring knowledge and the means of self-culture have never been entirely withheld; for not only are colored women with ambition and aspiration handicapped on account of their sex, but they are everywhere baffled and mocked on account of their race. Desperately and continuously they are forced to fight that opposition, born of a cruel, unreasonable prejudice which neither their merit nor their necessity seems able to subdue. Not only because they are women, but because they are colored women, are discouragement and disappointment meeting them at every turn. Avocations opened and opportunities offered to their more-favored sisters have been and are closed and barred against them. While those of the dominant race have a variety of trades and pursuits from which they may choose, the woman through whose veins one drop of African blood is known to flow is limited to a pitiful few. So overcrowded are the avocations in which colored women may engage and so poor is the pay, in consequence, that only the barest livelihood can be eked out by the rank and file. And yet, in spite of the opposition encountered and the obstacles opposed to their acquisition of knowledge and their accumulation of property, the progress made by colored women along these lines has never been surpassed by that of any people in the history of the world. Though the slaves were liberated less than forty years ago, penniless and ignorant, with neither shelter nor food, so great was their thirst for knowledge and so herculean were their efforts to secure it, that there are to-day hundreds of negroes, many of them women, who are graduates, some of them having taken degrees from the best institutions of the land. From Oberlin, that friend of the oppressed, whose name will always be loved and whose praise will ever be sung as the first college in the country which was just, broad, and benevolent enough to open its doors to negroes and to women on an equal footing with men; from Wellesley and Vassar, from Cornell and Ann Arbor, from the best high schools throughout the North, East, and West, colored girls have been graduated with honors, and have thus forever settled the question of their capacity and worth. But a few years ago in an examination in which a large number of young women and men competed for a scholarship, entitling the successful competitor to an entire course through the Chicago University, the only colored girl among them stood first and captured this great prize. And so wherever colored girls have studied their instructors bear testimony to their intelligence, diligence, and success.

With this increase of wisdom there has sprung up in the hearts of colored women an ardent desire to do good in the world. No sooner had the favored few availed themselves of such advantages as they could secure than they hastened to dispense these blessings to the less fortunate of their race. With tireless energy and eager zeal colored women have, since their emancipation, been continuously prosecuting the work of educating and elevating their race, as though upon themselves alone devolved the accomplishment of this great task. Of the teachers engaged in instructing colored youth it is perhaps no exaggeration to say that fully 90 per cent are women.¹ In the backwoods, remote from the civilization and comforts of the city and town, on the plantations, reeking with ignorance and vice, our colored women may be found battling with evils which such conditions always entail. Many a heroine, of whom the world will never hear, has thus sacrificed her life to her race, amid surroundings and in the face of privations which only martyrs can tolerate and bear. Shirking responsibility has never been a fault with which colored women might be truthfully charged. Indefatigably and conscientiously in public work of all kinds they engage that they may benefit and elevate their race. The result of this labor has been prodigious indeed. By banding themselves together in the interest of education and morality, by adopting the most practical and useful means to this end, colored women have in thirty short years become a great power for good.²

The home life of a people lies at the basis of its progress, and by the intendment of nature and the decree of society woman is regnant in the domestic sphere. Let it be frankly conceded that the education of the colored woman should be mainly of an industrial and domestic character. The higher education has a much narrower function in general for woman than it has for man. In its application to the colored race its function is proportionately restricted for the two sexes. If

¹ This estimate is too high.

² Progress of Colored Women, pp. 7-9.

the demand for college-bred men is small in proportion to the population, that for colored women is indefinitely more so.

The programme laid down by Dr. Crummell for the education of the colored woman of the South has never been, and perhaps can not be, improved upon:¹

1. Boarding schools for industrial training.
2. Intellectual training in the rudimentary branches.
3. Domestic industries.
4. The cultivation of flowers, fruits, and vegetables.

But there is ample scope for the few ambitious and determined spirits in the higher reaches of intellectual pursuits. School-teaching is very largely in the hands of colored women, and it is necessary for those who would occupy commanding places in the educational arena to equip themselves thoroughly for such exalted stations. There are other fields calling for higher preparation on the part of colored women. Not a few such women have entered the arena as authors, lecturers, and as practitioners in the learned professions. The distinctive schools for colored girls which have done and are doing so much to elevate negro womanhood are Scotia Seminary, in North Carolina; Spellman Academy, in Atlanta, Ga., and Hawthorn College, in Richmond, Va. These schools do little more than cover the scope as laid down in Dr. Crummell's programme, although they make excursions into the field of secondary studies.

Most of the institutions for the education of the colored race admit women on equal terms with men. Females are to be found in all of the courses, although they do not so generally patronize the higher reaches of the curricula.

The number of graduates from the collegiate courses can be seen from the accompanying table:

Colored women college graduates to 1898.

FROM NORTHERN INSTITUTIONS.²

Oberlin College.....	55	University of Iowa	1
Iowa Wesleyan University	4	Adrian College.....	1
University of Kansas	3	University of Idaho.....	1
University of Michigan	3	Bates College	1
Cornell University	3	Vassar College	1
Wellesley College	2	Mount Holyoke College	1
Wittenberg University.....	2	McKendree University	1
Geneva University.....	2		
Butler University.....	1	Total	83

FROM SOUTHERN INSTITUTIONS.

Fisk University	31	Roger Williams University.....	5
Shaw University.....	21	Berea College	4
Wilberforce University	19	Leland University	1
Paul Quinn College	13	Virginia Normal and Collegiate In-	
Knoxville College	10	stitute	1
Atlanta University	8	Paine Institute.....	1
Southland University	8	Straight University.....	1
Howard University	8	Branch University.....	1
Central Tennessee College	7	Clark University.....	1
Rust University	7	Allen University.....	1
Livingstone College	6		
Claffin University.....	6	Total	170
New Orleans University.....	5		
Philander Smith College	5	Grand total	252

¹ Africa and America, p. 80.

² Du Bois: College-bred Negro, p. 55.

There have been 82 colored women to graduate from Northern and 170 from Southern colleges. Of the colored colleges, only two institutions, both of which are under control of the Presbyterian Church, do not admit girls.

In the year 1898-99, of the college students of Howard, Atlanta, Fisk, and Shaw 22 per cent were females. The proportion shows a decided tendency to increase.¹

Of 100 college-bred women reporting their conjugal condition, one-half had been married. It is interesting to note the tendency of college-bred women to marry and develop cultivated homes. The great need of the negro is to develop a higher tone of family life. The highest culture of negro women will not have been in vain if it is exploited in the domestic sphere. There have been 2,272 college-bred negro men and 252 negro women, making a total of 2,524, of whom the females constitute 10 per cent. These college-bred women are or have been for the most part engaged in the work of teaching. Their influence for good has been felt in scores of communities throughout the country. Many of them have become wives of influential colored men, and have thus merged their talent and influence with the work of their helpmates and the development of cultivated family life.

Mention might be made of a few college-bred women who may be regarded as typical, albeit perhaps a little more conspicuous than the general average of their class.

Mrs. Fannie Jackson Coppin:² Fannie M. Jackson was born a slave in Washington, D. C., in 1837, and was purchased by her aunt. She was sent to Oberlin College, where she was graduated with honor.

She has the distinction of being the first colored person to teach a class at Oberlin College, which she taught with good success for two years. In 1865 she took a position in the Institute for Colored Youth, Philadelphia, and in 1869 was made principal of that institution, which position she has held for thirty years. She is the wife of Bishop Levi J. Coppin, of the African Methodist Episcopal Church. Perhaps no single individual influence among the colored race has done so much to stimulate high aspirations and zeal for knowledge and service as Fannie Jackson Coppin.

"Without doubt she is the most thoroughly competent and successful of the colored women teachers of her time, and her example of race pride, industry, enthusiasm, and nobility of character will remain the inheritance and inspiration of the pupils of the school she helped to make the pride of the colored people of Pennsylvania."³

Miss Lucy E. Laney is a graduate of Atlanta University. She has, mainly by her own endeavor, built up the Haines Institute, of Augusta, Ga., of which she is principal. This institution is under the auspices of the Presbyterian Church, and is one of the best secondary schools in the South.

Mrs. Booker T. Washington, wife of Prof. Booker T. Washington, principal of Tuskegee Institute, Tuskegee, Ala., was graduated from Fisk University in the class of 1889. She was a teacher at Tuskegee, where she met and married Professor Washington. She is a coworker with her distinguished husband and has been very successful in improving the social life of the black people in the black belt of Alabama. She is vice-president of the National Association of Colored Women.

Mrs. Anna J. Cooper was born in Raleigh, N. C. Mrs. Cooper entered Oberlin College in 1881, after the death of her husband, Rev. G. A. C. Cooper, a talented

¹ College-bred Negro, p. 57.

² The interesting work, *Women of Distinction*, by L. A. Scruggs, A. M., M. D., published at Raleigh, N. C., 1893, contains an account of a long list of notable colored women. Much of the information presented is from this book, although it has been confirmed by other sources of information and brought nearer to date.

³ Williams's *History of the Negro Race*, Vol. II, p. 449.

Episcopal divine. She was graduated from Oberlin in 1884 and has taught at Wilberforce University, Wilberforce, Ohio, St. Augustine Normal School, Raleigh, N. C., and the Colored High School, Washington, D. C., of which she is at present the principal. Her book, *A Voice from the South*, has elicited flattering encomiums from competent critics and forms a valuable part of the literature of the race problem.

Mrs. Mary Church Terrell was born in Memphis, Tenn., and was graduated from Oberlin College in 1884. She has taught at Wilberforce University and the Washington High School; has served as trustee of the public schools of Washington, D. C., and was the first president of the National Association of Colored Women. Mrs. Terrell is listed among the regular lecturers before the Western Summer Chautauquas, where her addresses are always well received.

Mrs. Josephine Turpin Washington was born in Richmond, Va., and was graduated from Howard University in 1886. She taught for several years in her alma mater before she was married to Dr. S. S. H. Washington, of Alabama. She has written quite widely in Southern and Northern papers and magazines and is well known as a worker for the general social betterment of the people.

College-bred women are everywhere doing their full share to lift the social life of the race to a higher level, which is ample justification of the training they have received.

The strivings and triumphs of colored women are well expressed in the following citation:

And so, lifting as we climb, onward and upward we go, struggling and striving and hoping that the buds and blossoms of our desires will burst into glorious fruition ere long. With courage born of success in the past, with a keen sense of the responsibility which we shall continue to assume, we look forward to a future large with promise and hope.¹

In the fruition of these desires and the fulfillment of this crescent promise the higher education will exercise no inconsiderable influence.

VI.—THE ORIGIN OF THE NEGRO COLLEGE.

Before plunging "in medias res," as Horace would say, let us take a brief survey of the educational opportunities of the colored race before the war. Schools for persons of color had been established and maintained at scattered points throughout the North for well nigh two hundred years. These schools usually met with the good will and approval of the white people in the several communities, although in some instances hostility and opposition were encountered. Several States from the earliest times admitted colored pupils to the general school system without distinction. One searches their records in vain for any legislation upon this question. It is a curious fact that the colored girl who was the initial, though innocent, cause of Miss Prudence Crandall's troubles had received her primary education in the district schools of Connecticut along with white pupils. In general, however, it might be said that the ante-bellum opportunities for an education on the part of the colored man were few and far apart. The training obtained in the schools was of the most meager and rudimentary sort. It embraced the fundamental processes, reading, writing, and arithmetic, and but little more. In the larger centers, such as New York, Philadelphia, and Baltimore, efforts were made, with more or less success, to establish academies and schools of higher training. A few white institutions would now and then admit a colored man who was preparing for the ministry. An occasional college would open its doors to him, but not very often and not very wide. It was late in the forties, I believe, when Harvard first let him in. When the colored applicant

¹ The Progress of Colored Women, by Mrs. Mary Church Terrell, p. 15.

Williams by name, first knocked at the door of this ancient seat of learning there was great confusion and uproar. The usual tactics were resorted to—the patrons threatened to withdraw their support—but President Everett manifested that deliberate courage which always conquers. He informed the objectors that if every other student should be withdrawn from the institution he would use all of its resources and machinery to educate this sole colored man. Dartmouth College was founded about the middle of the eighteenth century for the education of the Indians. So far as I have been able to ascertain, it has never made any discrimination on account of race or color. Those who have gone unto her with the proper intellectual and moral qualifications she has in no wise cast out.

By all odds the greatest stimulus which the educational interest of the colored race received before the war was the foundation of Oberlin College in 1833. A few other institutions extended to colored youth a cold permission; Oberlin a warm welcome. She cordially invited all colored people who were hungering and thirsting after knowledge to come unto her and be supplied. This, indeed, they did. They flocked to her in such numbers that in 1865 fully one-third of the students of Oberlin College were of the colored race. The policy of Oberlin in this regard can not be better set forth than was done by Miss Sophia Jex Blake, an English woman, who visited the leading American schools and colleges in 1865, for the purpose of studying their coeducational feature as applied to women. In her report published in England, entitled *A Visit to American Schools*, we read:

In 1834-35, the trustees [of Oberlin] took up their definite position with regard to one of the questions then even more bitterly agitated than now, and decided it by the free admission of all colored students on equal terms with the whites. This step marks an epoch in the educational history of America; for though solitary colored students had been admitted to Dartmouth College, New Hampshire, and possibly elsewhere, no such proclamation of welcome had hitherto gone forth from any educational body, and the extreme opposition which the measure called forth is the best testimony to the merits of its supporters.

The Ashum Institute was established by the Presbyterian Church in 1853, and chartered by the legislature of Pennsylvania in 1854. Its aim and purpose are clearly set forth by the action of the Presbytery which founded it: "There shall be established within our bounds and under our supervision an institution called the Ashum Institute, for the scientific, classical, and theological education of colored youth of the male sex." This institution still survives under the name of Lincoln University. It is the largest and one of the most prosperous and useful of the negro colleges.

When we turn from the North to the South, we are confronted by an appalling situation. As we look upon the intellectual horizon and mental sky, despair and gloom are everywhere—"darkness there and nothing more." Here and there it was indeed possible to find a few negroes who had furtively snatched a few morsels of knowledge. In the earlier stages of slavery, it was not uncommon to find slaves who had been taught to read and write. But the Missouri compromise, the Nat Turner insurrection, and the growing abolition sentiment of the North inflamed the Southern passion. It was at this time that the antinegro sentiment reached the acute stage of malignity. The legislation of most of the Southern States forbidding the teaching of negroes bears about the same date.

The educational value of slavery is thus portrayed by Col. George W. Williams:

The institution of American slavery needed protection from the day of its birth to the day of its death. Whips, thumb screws, and manacles of iron were far less helpful to it than the thralldom of the intellects of its helpless victims.¹

The real intellectual life of the race began with the overthrow of slavery. This applies to the North as well as to the South. When the smoke of war had blown

¹ History of the Negro Race, by George W. Williams, Vol. II, p. 147.

away, when the cessation of strife proclaimed the end of the great American conflict, when "the war drum throbbed no longer, and the battle flags were furled," there emerged from the wreck and ruin of war 4,000,000 of human chattels, who were transformed, as if by magic, in a moment, in the twinkling of an eye, from slavery to freedom, from bondage to liberty, from death unto life. These people were absolutely ignorant and destitute. They had not tasted of the tree of knowledge which is the tree of good and evil. This tree was guarded by the flaming swords of wrath, kept keen and bright by the avarice and cupidity of the master class. No enlightened tongue had explained to them the deep moral purpose of the Ten Commandments and the Sermon on the Mount. They were blind alike as to the intellectual and moral principles of life. Ignorance, poverty, and vice, the trinity of human wretchedness, brooded over this degraded mass and made it pregnant. The world looked and wondered. What is to be the destiny of this people? Happily at this tragic juncture of affairs, they were touched with the magic wand of education. The formless mass assumed symmetry and shape. Order began to rise out of chaos. Contrast that day with this day. Turn back 40 pages of the leaves of history. Look on this picture, and then on that. The words of prophecy are fulfilled: "Though ye have lien among the pots, yet shall ye be as the wings of a dove covered with silver, and her feathers with yellow gold." Nowhere in the whole sweep of history has the transforming effect of intelligence had a higher test of its power. Nothing is great or small, high or low, except by comparison. The same power, mainly educational, that has brought the negro safe thus far, will lead him on and on until he reaches the climax of his destiny.

The circumstances amid which this work had its inception read like the swift-changing scenes of a mighty drama. The armies of the North are in sight of victory. Lincoln issues his immortal emancipation proclamation; Sherman, with consummate military skill destroys the Confederate base of supplies and marches through Georgia triumphant to the sea; Grant is on his road to Richmond; the Confederate flag has fallen; Lee has surrendered; the whole North joins in one concerted chorus: "Mine eyes have seen the glory of the coming of the Lord." These thrilling episodes will stir our patriotic emotions to the latest generations. But in the track of the Northern army there followed a band of heroes to do battle in a worthier cause. Theirs was no carnal warfare. They did not battle against flesh and blood, but against the powers of darkness intrenched in the ignorance of a degraded people. A worthier band has never furnished theme or song for sage or bard. These noble women—for these noble people were mostly of the female sex—left homes, their friends, their social ties, and all that they held dear, to go to the far South to labor among the recently emancipated slaves. Their courage, their self-sacrificing devotion, sincerity of purpose and purity of motive, and their unshaken faith in God were their pass keys to the hearts of those for whom they came to labor. They were sustained by an unbounded enthusiasm and zeal amounting almost to fanaticism. No mercenary or sordid motive attaches to their fair names. They gave the highest proof that the nineteenth century, at least, has afforded that Christianity has not yet degenerated into a dead formula and barren intellectualism, but that it is a living, vital power. Their works do follow them. What colored man is there in all this land who has not felt the uplifting effect of their labors? Their monument is builded in the hopes of a race struggling upward from ignorance to enlightenment, from corruption to purity of life. These are they who sowed the seed of intelligence in the soil of ignorance and planted the rose of virtue in the garden of dishonor and shame. They had no foregoers; they have left no successors. It is said that gratitude is the fairest flower which sheds its perfume in the human heart. As long as the human heart beats in grateful

response to benefits received, these women shall not want a monument of living ebony and bronze.

The National Government inaugurated the work of education among the colored people of the South. Early in the war, Gen. U. S. Grant appointed Rev. John Eaton, afterwards United States Commissioner of Education, to take charge of the instruction of the colored people who were following in the wake of his army. The work developed into enormous proportions. General Banks undertook similar work in New Orleans. The Union Army was turned into a band of schoolmasters. Teachers from the North came down to work under the protection of the Federal Army. Northern churches and benevolent associations soon entered the field. Freedmen's aid societies were organized in all the leading denominations. Contributions poured in both from this country and from Europe. This work on the part of the Government soon grew too large and bulky to be wisely managed by disjointed agencies. In 1864 the Freedmen's Bureau was organized, with Gen. O. O. Howard at its head. The working of this bureau is too well known to need comment here. The reports of General Alvord, the superintendent of education for the bureau, are most valuable contributions to the history of this subject. The work of the Freedmen's Bureau was largely that of education. It confined its efforts chiefly to building schoolhouses and furnishing facilities of instruction, leaving Northern benevolence to supply and support teachers. It is estimated that the General Government thus spent fully \$5,000,000 for the education of the freedmen.

The need of the higher education was soon felt. Teachers and leaders must be provided. Hence arose the negro college and university. When the Freedmen's Bureau came to an end it turned its educational interests over to religious and benevolent societies, which had cooperated with it in the work. About this time also the reconstruction movement was under way. A great many things have been written in condemnation of this unwise experiment in government. The rule of black ignorance under the guidance of white villainy proved a failure. But it has left the South one monument that should take away some of the unsavory flavor from its memory. It established the public-school system throughout the South, and thereby conferred upon that section the greatest boon which it has received since the adoption of the Constitution. It is upon this corner stone that the South must build all her hopes for future years. Naturally enough the religious and denominational associations did not want their work swallowed up in the public-school system. These schools became chartered institutions. They assumed the high-sounding name of college or university, while their work was mostly of an elementary character.

In addition to the institutions of the class above described, almost every Southern State has established a State college for colored youth as an offset to the State institutions maintained for the whites. The National Government appropriates a large sum of money for colleges of agriculture and the mechanic arts. Wherever a State has separate schools it is stipulated that the division of this fund between the races must be in numerical proportion to their numbers. Thus the negro colleges were born in weakness. May they be raised in power.

The accompanying table will show the order in which the negro colleges were established, and under what auspices they were founded and supported.

Negro colleges, in the order of establishment.¹

College department established.	Name.	Founded by—
1864.....	Lincoln University.....	Presbyterians.
1866.....	Wilberforce University.....	African Methodists.
1868.....	Howard University.....	Freedman's Bureau, United States Government.
1869.....	Berea College.....	American Missionary Association.
1870.....	Leland University.....	Mr. H. Chamberlain.
1870.....	Benedict College.....	Baptists.
1871.....	Fisk University.....	American Missionary Association.
1872.....	Atlanta University.....	Do.
1872.....	Biddle University.....	Presbyterians.
1872.....	Southland College.....	Friends.
1873.....	Roger Williams University.....	Baptists.
1874.....	Central Tennessee College.....	Methodists.
1874.....	New Orleans University.....	Do.
1874.....	Shaw University.....	Baptists.
1874.....	Rust University.....	Methodists.
1874.....	Straight University.....	American Missionary Association.
1878.....	Branch College (Arkansas).....	State.
1878.....	Clafin University.....	Methodists.
1879.....	Knoxville College.....	Presbyterians.
1879.....	Clark University.....	Methodists.
1880.....	Alcorn University (Mississippi).....	State.
1880.....	Wiley University.....	Methodists.
1882.....	Paine University.....	Southern Methodists.
1883.....	Allen University.....	African Methodists.
1883.....	Livingstone College.....	Zion Methodists.
1885.....	Tallahega College.....	American Missionary Association.
1885.....	Virginia Normal and Collegiate Institute.....	State.
1885.....	Paul Quinn College.....	African Methodists.
1890.....	Lincoln Institute.....	Colored soldiers and State.
1890.....	Morris Brown College.....	African Methodists.
1893.....	Atlanta Baptist College.....	Baptists.
1894.....	Georgia State Industrial College.....	State.
1894.....	Delaware State College.....	Do.
1894.....	Philander Smith College.....	Methodists.

¹ Taken from the College-Bred Negro.

VII. WORK, WAYS, AND FUTURE OF NEGRO COLLEGES.

"New occasions teach new duties." The conditions out of which the colored institutions grew are quite different from those by which they are surrounded to-day. A great wave of philanthropic enthusiasm swept the country immediately after the war. Institutions had been founded to meet the immediate needs of the situation. These schools must adjust themselves to the change of environments. The experimental stage has passed. The following announcement of the trustees of the John F. Slater fund is eloquent with suggestion:

"The trustees believe that the experimental period in the education of the blacks is drawing to a close. Certain principles that were doubted thirty years ago now appear to be generally recognized as sound. In the next thirty years better systems will undoubtedly prevail."¹

When these schools were first founded the work was an untried experiment, now it is settling into definite lines; then the great demand was to provide teachers, now there are more teachers than can be supplied with schools; then the public-school system had not been organized in the South, now schools are well established in all the States; then high and normal schools were unknown, now each Southern State has one or more of them under its jurisdiction. The relation between private and public schools is one of primary importance. There is some jealousy and not a little rivalry between them in many instances. The private schools were first in the field and do not wish to give way. It is, however, decidedly unwise for private instruction to rival the public schools in their legitimate

¹ The trustees of the John F. Slater fund, Occasional Papers, No. 1, page 4.

territory. According to our theory of government primary education is the duty of the State. It is true that the Southern States are too poor to do their full duty in this regard. The effort which they put forth, however, is commendable in the highest degree. No other community in this country lays such heavy proportional taxes upon itself for school purposes as the South.

Any supplement to the public schools of the South has always been welcome. The Peabody and Slater funds have added greatly to the educational progress of that section. But the question arises as to the wisdom of private institutions, calling themselves colleges and universities, duplicating the work of the public schools. An examination of the catalogues of many of the colored colleges will show that they are for the most part huge primary schools with the college course attached for ornament and style.

Proportion of college students to total enrollment in negro colleges, 1898-99.

College.	College students.	Secondary students.	Primary students.
Lincoln	135	0	0
Biddle	69	135	0
Fisk	51	180	183
Howard	42	325	0
Shaw	37	225	0
Atlanta	33	230	22
Wilberforce	31	159	59
Virginia Normal and Collegiate Institute	28	138	162
Leland	20	34	33
Livingstone	20	52	159
Allen	19	111	149
State College (Delaware)	18	21	0
Knoxville	18	94	145
Claffin (1897-98)	17	109	553
Clark	16	108	322
Philander Smith	15	69	238
Roger Williams	15	99	74
New Orleans	14	37	275
Georgia State	12	72	140
Paine	10	180	80
Talladega	9	66	129
Rust	9	76	125
Atlanta Baptist	9	25	66
Arkansas Baptist	9	32	142
Straight	8	131	382
Southland	8	57	70
Southern	7	66	341
Wiley	5	49	288
Branch (Arkansas)	2	57	129
	*		

The poet Horace tells us that a lawyer of mediocre ability may be held in high esteem, though he be not so eloquent as Messalla nor so learned as Aulus; but neither gods nor men nor booksellers will tolerate a mediocre poet. What the Apulian bard remarks of the poet will apply with equal force to a college. There can be no excuse or toleration for an inferior institution of high pretension. The old adage, "a whole loaf or none," suggests a principle that is at once salutary and sound. One had better remain untaught in the higher branches of learning than to be imperfectly instructed. From an intellectual standpoint it is better not to see at all than to see through a glass darkly. The worst possible condition of the mind is to have it crammed with smatterings of undigested and unassimilated knowledge. This is the state of mind from which spring bigotry, conceit, and shallow pretense. A self-respecting individual can not afford to be very different in his dress and habits of life from the society in which he moves; if he finds it too difficult to keep pace with his class, he is relegated to the grade below by the law of social gravitation. So it is with an institution of learning; it can not afford to be much different from other schools of like grade and pretension; and if it can not maintain itself on such a plane, it had better fall back to the next lower grade of academy or fitting school. Colored colleges need not expect

exemption from the usual tests of excellence. Knowledge is color-blind. Science and philosophy do not accommodate themselves to the various hues of the human species.

The requirements for admission to colored colleges, as well as the extent of courses and allotment of time to the several subjects of study, may be seen from the accompanying tables:

Requirements for admission to negro colleges.

Institution.	Length of preparatory course.	Number of years of preparatory study required in—					Weeks of study per year.
		Latin.	Greek.	Mathematics.	English.	Other important studies.	
Lincoln	0	0	0	0	0	$\frac{1}{2}$	32
Biddle	2	2	1	$1\frac{1}{2}$	1	1	35
Fisk	3	3	2	$2\frac{1}{2}$	0	$2\frac{3}{4}$	37
Howard	4	4	2	$2\frac{1}{2}$	$1\frac{1}{2}$	2	36
Shaw	2	2	1	2	2	2	32
Atlanta	3	3	1	2	1	3	34
Wilberforce	3	3	2	2	1	$1\frac{1}{2}$	39
Virginia Normal and Collegiate Institute	2	2	0	$1\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{1}{2}$	33
Leland	4	3	2	$3\frac{1}{2}$	$\frac{1}{2}$	$1\frac{1}{2}$	31
Livingstone	3	3	2	2	1	5	28
Paul Quinn	3	3	2	3	0	2	36

From this it would seem that these colleges ranked in the severity of their entrance requirements about as follows:

1. Howard: Nearly equal to the smaller New England colleges.
2. Fisk, Atlanta, Wilberforce, Leland, Paul Quinn: From one to two years behind smaller New England colleges.
3. Biddle, Shaw, Virginia Normal and Collegiate Institute, Livingstone: From two to three years behind smaller New England colleges.
4. Lincoln: A little above an ordinary New England high school.

Table showing what fractional part of the four-years' college course is devoted to certain studies.

Institution.	College preparatory course of—	English.	Modern languages.	Ancient languages.	Natural science.	Political science, history, and philosophy.	Mathematics.
	<i>Years.</i>						
Howard	4	1-8	1-16	1-4	1-8	1-4	1-16
Fisk	3	1-30	1-6	1-3	1-5	1-6	1-8
Atlanta	3	1-16	1-13	1-3	1-6	1-4	1-7
Wilberforce	3	1-18	-----	1-2	1-5	1-9	1-7
Leland	4	1-15	-----	1-3	1-4	1-5	1-7
Paul Quinn	3	1-20	1-20	1-3	1-5	1-5	1-7
Biddle	2	1-12	1-12	1-3	1-6	1-7	1-6
Shaw	2	1-6	1-8	1-5	1-5	1-6	1-8
Virginia Normal and Collegiate Institute	2	1-15	1-8	1-3	1-9	1-7	1-5
Livingstone	2	1-10	-----	1-2	1-9	1-10	1-6
Lincoln	-----	1-7	-----	2-5	1-9	1-9	1-5

Approximate distribution of work in negro colleges.

[Hours of recitation per week for the year.]

FRESHMEN.

	Howard.	Fisk.	Atlanta.	Wilberforce.	Leland.	Paul Quinn.	Biddle.	Shaw.	Virginia Normal and Collegiate Institute.	Livingstone.	Lincoln.
Latin	4 $\frac{1}{2}$	5	4	5	5	5	4	4	5	4	4
Greek	4 $\frac{1}{2}$	5	5	5	5	5	4	4	5	4	4
Mathematics	5	5	5	5	5	5	4	4	5	4	4
English	2	0	1	0	0	0	1	1	0	2	3
Other studies	$\frac{3}{4}$	0	2	0	0	0	4	3	1	2	1

SOPHOMORES.

	Howard.	Fisk.	Atlanta.	Wilberforce.	Leland.	Paul Quinn.	Biddle.	Shaw.	Virginia Normal and Collegiate Institute.	Livingstone.	Lincoln.
Latin	3 $\frac{1}{2}$	3 $\frac{1}{2}$	4	5	4	4	4	4	4	4	3
Greek	1 $\frac{1}{2}$	3 $\frac{1}{2}$	5	5	4	4	4	0	4	4	3
Mathematics	3 $\frac{1}{2}$	3	5	3 $\frac{1}{2}$	4	4	3	4	4	4	3
English	2	0	0	0	0	0	2	3	0	3	1
History	0	0	2 $\frac{1}{2}$	0	0	0	0	0	0	2	2
Natural science	3	1 $\frac{1}{2}$	0	0	4	4	3	4	0	0	2
Civics	0	1 $\frac{1}{2}$	0	1 $\frac{1}{2}$	0	0	0	0	0	0	0
Modern languages	0	5	0	0	0	0	0	0	4	0	0
Other studies	0	0	0	0	0	0	$\frac{1}{2}$	$\frac{1}{2}$	0	0	3

JUNIORS.

	Howard.	Fisk.	Atlanta.	Wilberforce.	Leland.	Paul Quinn.	Biddle.	Shaw.	Virginia Normal and Collegiate Institute.	Livingstone.	Lincoln.
Latin	(1)	1 $\frac{1}{2}$	0	4	0	0	0	0	0	4	3
Greek	(1)	3 $\frac{1}{2}$	0	4	4	4	4	0	4	4	3
Mathematics	(1)	0	0	0	0	0	2 $\frac{1}{2}$	0	4	2	3
English	1 $\frac{1}{2}$	0	2 $\frac{1}{2}$	0	4	3	2	3	0	2	2
History	1(3)	0	0	0	0	2	0	0	0	2	0
Natural science	1 $\frac{1}{2}$	5	5	6 $\frac{1}{2}$	6	5 $\frac{1}{2}$	4	5	2 $\frac{1}{2}$	3	3
Political science	0	0	4	0	0	0	0	0	0	0	0
Modern languages	1(4)	5	4 $\frac{1}{2}$	0	0	0	2	4	4	0	0
Psychology and philosophy	1(0)	0	0	1 $\frac{1}{2}$	2	2	1	4	1 $\frac{1}{2}$	2	3
Other studies	1(3)	0	1	0	0	0	0	$\frac{1}{2}$	0	0	0

SENIORS.

	Howard.	Fisk.	Atlanta.	Wilberforce.	Leland.	Paul Quinn.	Biddle.	Shaw.	Virginia Normal and Collegiate Institute.	Livingstone.	Lincoln.
Latin	0	0	0	0	0	0	0	0	0	3	3
Greek	0	0	1 $\frac{1}{2}$	0	0	0	1 $\frac{1}{2}$	0	0	3	3
Mathematics	(2)	0	0	0	0	0	0	0	0	0	3
English	1 $\frac{1}{2}$	1 $\frac{1}{2}$	$\frac{1}{2}$	3 $\frac{1}{2}$	0	5	$\frac{1}{2}$	3	4	0	1
History	0	0	0	0	2	0	0	0	0	0	2
Natural science	2(3)	5	5	5	4	3 $\frac{1}{2}$	4	4	4	4	2
Political science	2(2 $\frac{1}{2}$)	3 $\frac{1}{2}$	4	1 $\frac{1}{2}$	4	2 $\frac{1}{2}$	1 $\frac{1}{2}$	3	0	0	0
Modern languages	(2)	0	0	0	0	0	1 $\frac{1}{2}$	3	0	0	0
Psychology, etc	6 $\frac{1}{2}$	5	2 $\frac{1}{2}$	4	6	5	6	4	5	4	2
Other studies	0	0	3 $\frac{1}{2}$	0	0	0	0	$\frac{1}{2}$	0	0	$\frac{1}{2}$

¹ Ten additional hours to be chosen from these. The figures in parentheses indicate a probable course.

² Five and one-third hours of electives to be chosen from these. The figures in parentheses indicate a probable course.

The best of these schools are almost on par with the average New England college, so far as standard of admission and reach and range of curriculum are concerned. Howard University stands at the head of the list. It would certainly not fall far below the prevailing collegiate standard, with Fisk and Atlanta as close seconds. From these the range is downward until they reach the level of a New England fitting school.

The chartered institutions are usually located in the large centers of population, where the provisions for public institutions are more or less ample. Men who

have carefully studied the situation are asking themselves the question whether it is good policy to entreat Northern philanthropy to carry on a work which the States themselves can more easily perform. There is no doubt that there will be outside benevolence to assist in this work for a long time to come. Begging at best is a disagreeable task. It should never be indulged in unless there is some overshadowing necessity. It is the unanimous opinion of thoughtful observers, as well as the dictate of common prudence, that these institutions should relegate to the public schools all the work that properly belongs there, and should confine their energies to that class of work which falls beyond, or at least outside of, the range of public instruction.

The relative influence of white and colored men in the management and conduct of the schools is a matter of much moment and not a little delicacy. This question, however, is a persistent one. It will not down at our bidding and has no regard for our delicate scruples; it requires brave, heroic treatment; it should be handled with all the plainness of English speech. Most of these schools are under the management and control of some church or religious organization. These societies have founded the work, developed the plants, and accumulated the property. This class of schools is usually directed and officered by white men. There is a good deal of human nature even in the persons who are engaged in missionary work. Nowhere do we find it a common thing for men to voluntarily yield up authority when it is possible for them to retain it. It is only reasonable to suppose that this class of schools will continue to be dominated by white men. The argument is advanced that white people furnish the means, and it is but fair that they should dispose of it in any manner which they deem fit. It is true that practically all of the money for this work is furnished by the whites. However it may be liked or disliked, it will probably continue to be the fact that as long as the whites contribute the support they will continue to wield the dominant influence.

Those institutions which are supported by the States are under the control of colored men. It is the policy of the South to let the negro manage his own affairs. It is found that those institutions which are under colored management are in no wise behind the rest in point of discipline, order, and good results.

There is still another class of institutions, originally supported and managed wholly by colored men. These are to be found for the most part within the limits of the A. M. E. Church. There are as many as 40 such institutions, several of which take high rank as colleges. It is here that we must look for the best illustrations of independent action in many directions. These institutions are of the colored people, by the colored people, and for the colored people.

The resources of these schools are a matter of serious concern. The total productive endowment of all the higher institutions is about three-quarters of a million dollars. This is about sufficient to run one small college alone. The small amount which colored men have contributed to these funds is remarkable. There have been several illustrious examples of colored men in the A. M. E. Church who have left the bulk of their fortunes to the educational institutions; but I know of no others who have followed their example. The race spends immense sums of money for the support of their religion, but very little for education. The value of negro church property is placed at \$26,000,000, all of which has been contributed or solicited by themselves; but their contribution to education would hardly amount to a tenth part of that sum. One thing seems to be certain, the support as well as the management of colored institutions must ultimately be transferred from the white to the colored race, if they are to be permanent. The resources of charity will not last forever. A people who really deserve and appreciate institutions for their moral and intellectual welfare will sustain them. It is a physical impossibility for a body to remain in stable equilibrium whose center of gravity falls outside of the basis of support.

There are entirely too many of these colleges. Every school that teaches the least bit of classics is ambitious to confer the academic degrees. There is not a fitting school pure and simple in the whole range of the educational work. There are more universities for colored people in the United States than there are altogether in England or France and quite as many as there are in Germany. If the educational work could be harmonized and systematized, so that a majority of the universities could be reduced to fitting schools and academies, leaving two or three stronger ones to carry on the higher lines of study, the work could be done with half the present expense and with thrice the efficiency.

The denominational feature is largely responsible for the great number of institutions with high-sounding names. Every denomination is anxious to have its own schools, to enforce its own principles, and inculcate its own doctrines. Hence it is not an uncommon thing to find two or three universities of as many different denominations in a single Southern city. Any unity of action or harmony of plan is made exceedingly difficult on account of this denominational rivalry.

A university in its complete growth and equipments represents the ripest product of a civilization. The colored schools, notwithstanding their shortcomings, represent more fully than anything else the progress of the race. They not only show what has already been accomplished, but are the surest promise of what is to be.

The collegiate prerogative of conferring degrees is one which these schools exercise without the least modesty. Degrees were originally conferred upon students as a license to teach. In course of time they came to stand for various achievements in several branches of learning. Some of them indicated the courses of study pursued, while others stood for eminence or proficiency in the arts and sciences. A love of cheap distinction seems to be the greatest malady which afflicts the American mind. The theory is that under democratic institutions the love of titular distinctions is eradicated. Our Government grants no titles of nobility. To be an American citizen is supposed to be honor enough for any man. We laugh at the number of worn-out counts and earls and what-nots of the old world, but we can overmatch them in the number and variety of degrees. Few people seem to be satisfied with a plain name; they want some addition either before or after it. Our civilians who never saw action in the field and who know no more about military operations than Shakespeare's arithmetician are dubbed "captain," "colonel," or "general." Men are called "judge" whose judgment would not be respected on a single item of human interest from a horse race to metaphysics. Masonic societies load down their votaries with a list of degrees that seem to exhaust the letters of the alphabet. American heiresses swap their millions for a titled name.

It should not be wondered at, then, that colleges, which hold the exclusive patent of literary degrees, should partake of this same lavish spirit. The smaller and feebler colleges seem to make up their deficiencies by the number and variety of degrees which they confer. It is said that in many cases they are sold outright. The story is told of a certain Southern institution that its faculty consisted of two members of the same family. The father was president and the son was professor of the whole curriculum. The faculty met on a day and voted to confer the degree of LL. D. upon the president, and, in order to return the compliment, the president conferred the degree of Ph. D. upon the faculty. The writer is familiar with the facts of the following case: An eminent divine was invited to deliver the commencement address before a certain college class. After having performed the task to the best of his ability the institution offered either to pay his railroad fare or to give him a D. D. The railroad fare was preferred. This evil has become so prevalent that not only educators but common-sense men in all walks of life have become aroused to its serious nature. Several of the leading institutions have decided not to confer any more honorary degrees. Mr. James R. Garfield has recently introduced a measure in the Ohio legislature to have that

body regulate the matter of degrees from the colleges of the State. President Cleveland several years ago declined the honor of an LL. D. from Harvard University; more recently he has declined the same proffer from Wilberforce. His declension is based on the ground that he is not a college graduate and is not otherwise entitled to literary distinctions.

What has been said so far upon this topic refers to the abuse of degrees in general and is not especially applicable to colored schools. This abuse is a general one. Our 400 or more colleges have so flooded the land with learned degrees that they have lost their intended significance. They are not recognized by the institutions of Europe. There is an old adage in the South, "If you want to see a thing run in the ground, let the negroes get hold of it." This adage has been more than justified in the present instance. The matter of degrees has been carried to ridiculous, even to disgusting, extremes. The extravagant lavishness with which persons who in the nature of the case can have no claim to them are loaded with literary degrees would be amusing if it were not so amazing. Colored men are no longer willing to have their attainments properly characterized by the three R's; they must be represented by the various combinations of L's and D's. It has been facetiously stated that a great many colored men who stagger under the heavy load of A. B., A. M., D. D., LL. D., etc., would have their acquisitions more accurately described by A B C and the other letters of the alphabet. There are hundreds of colored men dubbed D. D. who can not give a critical rendering of a single passage of Scripture in the original or give an opinion on any phase of theology that would challenge respect, or write a single line on any topic, sacred or secular, that will live six hours after they are dead. Many of these degrees have been conferred on account of useful work, pious life, holy consecration, or ecclesiastical eminence. Too much can not be said in praise of these things. But it is pure mockery, a travesty upon learning, to decorate such persons with honors which they do not deserve and whose significance they can not appreciate. Do men gather grapes of thorns or figs of thistles? So far has this practice prevailed that when it is announced that the Rev. Mr. Blank, D. D., LL. D., is going to preach at such and such a church, we no longer think of a learned scholar who can partake of the things of God and show them unto us with logical clearness and power, but instead our risible emotions are aroused. Ecclesiastical degrees are not more abused than those of purely literary or scientific import. Many of the colleges fall short of the average standard. Their regular degrees, therefore, do not stand for a fair amount of culture. The goods are not properly labeled. Thus the land is full of A. B.'s and A. M.'s which could not stand the test of severe standards. It was but yesterday that the negro race first saw the light of intellectual day. The bulk of the race is still illiterate or nearly so. So it is marvelous beyond words that so many of them have reached the highest pitch of literary honors. Where else in history is there such a sharp contrast of bright lights and deep shadows? When we think of the suddenness with which this has been brought about, we can but suppose that these learned men must have sprung into being full fledged, like the Grecian Minerva from the brain of Zeus.

This question has its serious as well as its facetious side. It points out an evil and suggests a duty. It is positively damaging to sound scholarship and to high standards. If the highest honors are so easily won, and when won are of so little significance and worth, what stimulus is there for young men to struggle for honest acquisitions? There needs to be cultivated a wholesome public sentiment which will not tolerate such intellectual sham. Institutions which have no higher appreciation for this collegiate function than to abuse it so shamefully should meet with stern popular disfavor. The educators of colored youth can render no greater service to the intellectual welfare of the race than to discourage intellectual dishonesty under the guise of unmerited degrees. These colleges and universities should see to it that these bogus honors are stopped.

Negro college graduates of white colleges, according to institutions.

(A) THE LARGER UNIVERSITIES.

Name of college.	Total gradu-ates.	Name of college.	Total gradu-ates.
Harvard	11	Catholic	3
Yale	10	Chicago	2
Michigan	10	Stanford	2
Cornell	8		
Columbia	4	Total	54
Pennsylvania	4		

(B) COLLEGES OF SECOND RANK.

Oberlin	128	University of Nebraska	2
University of Kansas	16	Wesleyan (Connecticut)	2
Bates	15	Radcliffe	2
Colgate	9	Wellesley	2
Brown	8	Northwestern	1
Dartmouth	7	Rutgers	1
Amherst	7	Bowdoin	1
Bucknell	7	Hamilton	1
Ohio State	7	New York University	1
Williams	4	Rochester	1
Boston University	3	Denver	1
University of Minnesota	3	De Pauw	1
Indiana	3	Mount Holyoke	1
Adelbert	3	Vassar	1
Beloit	3		
Colby	3	Total	245
University of Iowa	2		

(C) OTHER COLLEGES.

South Carolina	10	Ohio Wesleyan	2
Geneva	9	Lombard	1
Hillsdale	7	Otterbein	1
Lafayette	6	Southwestern Kansas	1
Wesleyan (Iowa)	4	Allegheny	1
Dennison	4	Olivet	1
Baldwin	4	Albion	1
Western of Pennsylvania	3	University of Idaho	1
Hiram	3	Iowa College	1
Wittenberg	3	Upper Iowa University	1
Butler's	3	University of Omaha	1
Westminster	3	McKendree	1
St. Stephen's	3	Illinois	1
Antioch	3	Ohio University	1
Tabor	2		
Knox	2	Total	90
Washburn	2		
Adrian	2	Grand total	389
Washington and Jefferson	2		

Negro college graduates from negro colleges.

Name of college.	Total gradu-ates.	Name of college.	Total gradu-ates.
Howard	96	Clark	21
Fisk	194	Philander Smith	29
Atlanta	94	Roger Williams	76
Wilberforce	130	New Orleans	30
Leland	16	Georgia State	1
Paul Quinn	13	Paine	11
Biddle	140	Talladega	5
Shaw	106	Rust	30
Virginia Normal and Collegiate In-stitute	27	Atlanta Baptist	7
Livingstone	33	Arkansas Baptist	11
Lincoln	616	Straight	19
Berea	29	Southland	19
Allen	24	Wiley	9
State College of Delaware	6	Branch, Arkansas	6
Knoxville	44	Lincoln Institute	3
Clafin	46	Bennett	46
		Central Tennessee	

There have been 1,941 graduates from negro colleges, and 339 from white institutions. Their occupations, usefulness, and influence must be taken as the highest measure of the value and importance of the higher education. The fifth Atlanta conference was at great pains to study this phase of the question. The 1,312 negro graduates reporting were distributed as follows among the several vocations:

	Number.	Per cent.		Number.	Per cent.
Teachers.....	701	53.4	In business.....	47	3.6
Clergymen.....	221	16.8	Farmers and artisans.....	35	2.7
Physicians.....	83	6.3	Clerks, secretaries, etc.....	22	2.2
Students.....	74	5.6	Editors.....	9	-----
Lawyers.....	62	4.7	Miscellaneous.....	5	-----
In Government service.....	53	4			

Commenting on these figures, the report continues:

These figures illustrate vividly the function of the college-bred negro. He is, as he ought to be, the group leader; the man who sets the ideals of the community where he lives, directs its thought, and heads its social movements. It need hardly be argued that the negro people need social leadership more than most groups. They have no traditions to fall back upon, no long-established customs, no strong family ties, no well-defined social classes. All these things must be slowly and painfully evolved. The preacher was, even before the war, the group leader of the negroes, and the church their greatest social institution.¹ Naturally, this preacher was ignorant and often immoral, and the problem of replacing the older type by better-educated men has been a difficult one. Both by direct work and by indirect influence on other preachers and on congregations, the college-bred preacher has an opportunity for reformatory work and moral inspiration, the value of which can not be overestimated. The report of the Atlanta conference on "Some efforts of American negroes for their own social betterment," shows the character of some of this work.

It has, however, been in the furnishing of teachers that the negro college has found its peculiar function. Few persons realize how vast a work, how mighty a revolution has been thus accomplished. To furnish 5,000,000 and more of ignorant people with teachers of their own race and blood in one generation was not only a very difficult undertaking but a very important one, in that it placed before the eyes of almost every negro child an attainable ideal. It brought the masses of the blacks in contact with modern civilization, made black men the leaders of their communities and trainers of the new generation. In this work college-bred negroes were first teachers and then teachers of teachers. And here it is that the broad culture of college work has been of peculiar value. Knowledge of life and its wider meaning has been the point of the negro's deepest ignorance, and the sending out of teachers whose training has not been merely for bread winning, but also for human culture has been of inestimable value in the training of these men.²

Another question which philanthropists have a right to ask about these graduates is, What are they doing for the general social betterment of the race aside from the vocations from which they derive a livelihood? The following table throws much light on this question, which gives a list of college-bred negroes who are engaged in religious, philanthropic, and literary work:

Occupation.	Number.	Occupation.	Number.
Active in religious service.....	101	Organized charity.....	15
Investing in negro business enterprises.....	48	Kindergartens and mothers' meetings.....	7
Contributing to newspapers.....	105	Building associations.....	7
Editing and publishing newspapers.....	46	Hospitals.....	10
Lecturers.....	21	Farming and truck gardens.....	4
College and student aid.....	20	Savings banks.....	10
Benevolent club work.....	9	Contributing to magazines.....	11
Nurseries, orphanages, and homes.....	12	Papers before societies.....	9
Slum, prison, and temperance work.....	16		

¹ Cf. The New World, December, 1900, article Religion of American Negro.

² College-bred Negro, p. 65.

It is true that the college-bred negro has not as yet entered, in appreciable numbers, upon productive pursuits, but has followed the line of least resistance, and fitted into positions that were already prepared. The college-bred men of New England, up to the middle of the present century, sought the ranks of the learned professions and political careers, but seldom entered upon practical pursuits. When the educated negro finds prepared places all occupied, he too will be compelled to launch out into profitable industry and productive enterprises. And then he will be found to be a captain of industry, just as he is now the leader in the more leisurely and learned callings.

The negro college has a valuable function in the general educational equation and will occupy an important place among American institutions of the future. They have been centers of light that have illuminated the darksome path of an entire race. They antedated the public schools, and gave to the negro his initial impulse toward the better things of life. There is scarcely an educated colored man or woman in the South who has not been touched by their beneficent influence. The value of an object is enhanced by contemplating its absence or withdrawal. We do not dare even think what the condition of the negro would be if it had not been for these colleges. It is equally painful to speculate as to the conditions of the future if these institutions should be withdrawn. How could the preachers, of whom there is need for many thousands, be prepared for the work? Where would the lawyers and doctors and teachers in the higher range of instruction qualify for their function?

The vital question of perpetuity is one of financial support. Only two of them, the Gammon School of Theology and the Lincoln University, are adequately endowed. The others must depend for the most part upon current contributions from the State, religious denominations, and private philanthropy. Those schools which have been fostered by religious denominations will doubtless continue to receive such support as a means of religious propagandism. Fisk University and the Union University at Richmond, Va., will doubtless be upheld as representing the highest expression of the missionary and philanthropic endeavor of their respective denominations. The future of those schools which have no definite mooring, but which must depend upon the ebb and flow of public and private favor, is more precarious and uncertain.

It can not be denied that the trend of private philanthropy is toward the industrial and practical idea to the discouragement of the higher culture. This turn in public sentiment is scarcely due to the abiding conviction that the industrial policy will come any nearer solving unsettled problems than the higher knowledge, but is perhaps the outgrowth of the feverish spirit of the Athenian, which is ever in quest of some new thing. When the new idea has been exploited as fully as the old, there will in all probability be a redistribution of public favor between the two according to their proper proportion and balance.

The tendency on the part of the State colleges is to eliminate everything that flavors of the higher culture, and to adapt their courses to the requirements of an agricultural and industrial régime. There can be but little doubt that the State institutions will relinquish what little claim they now have to collegiate distinction and take rank in the more elementary and practical class.

There is need of a sensible adaptation of the negro college to the requirements of its function in the light of what experience has taught us.

1. Let it be conceded that a backward and suppressed race must of necessity be afflicted with great intellectual poverty. Such a race can, at best, produce only a small number of youth who, with their present incumbrances, are likely to profit by the advanced courses of learning. The mass of any people must ever fall short of the collegiate grade. At present the negro shows only 1 student in 3,000 of the population, who by the widest stretch of courtesy can be said to be pursuing the

higher education. After abstracting all who are able to think, there will be left sufficient to toil.

2. The courses of study should be thorough and the instruction competent. Nothing is so dangerous to a backward race as a smattering of learning. The people need sane, safe, cautious, conservative standards. They are already too prone to superficiality and show.

3. The Northern college is not likely to inspire colored youth with enthusiasm and fixed purpose for the work which destiny has assigned them. The white college does not contemplate the needs of the negro race. American ideals could not be fostered in the white youth of the country by sending them to Oxford or Berlin for their tuition. No more can the negro gain racial inspiration from Harvard or Yale. And yet it would be a calamity to cut them off from these great centers of learning. They need the benefit of contact and comparison, as well as the greater facilities which they afford. If the negro is shut in wholly to himself he becomes too painfully self-conscious; on the other hand, if allowed to stray too far from his race, he finds himself stranded on the barren shores of culture, or, like Mohammed's coffin, suspended in mid-air, without upper or nether support. The negro college in the South and the larger institutions of the North will preserve a just balance between these conflicting principles.

4. Negroes should contribute liberally toward their own higher education. You who have been benefited ought therefore to be enlarged. Thousands of colored people are better able to contribute to such movements than many of the regular contributors in the North. No equilibrium can be stable when the center of gravity falls outside of the basis of support.

5. There are by far too many schools which claim the collegiate function. The number might well be reduced to three or four—perhaps one for each of the leading denominations and a central one in the city of Washington.

6. There is a great need of fitting schools which should be content to do thorough secondary work without the ambition to assume full academic prerogative. Most of the schools which now call themselves colleges and universities might easily confine themselves to this work without suffering the least in real character.

7. The work of primary grades, now a prominent feature of most of the negro universities, should be relegated to the public schools, and their courses should be confined to those lines of instruction which fall beyond, or at least outside of, the scope of public instruction. The work now undertaken could thus be done at a tithe of the present cost with thrice the efficiency. The higher educational interest of the race needs to be rationally modified and sensibly adopted. There should be a sharp definition of the function and sphere of the college and those of the industrial school. Appeals should be made to philanthropic sources on the basis of relative, not rival claims. It would be as unwise policy on the part of philanthropy to abandon the higher education of the negro as it would be to give up his industrial training. They are supplementary parts of a symmetrical whole. This ought ye to have done and not to have left the other undone.

VIII. THE NEGRO IN NORTHERN COLLEGES.

There are, or were in 1890, 442 universities or colleges in the United States, counting the good, the indifferent, and the bad. Many of these—generally the poorer and feebler ones—are located in that section of the country where the races are not accustomed to be taught together. The largest, richest, and most influential of these, however, are open to all, without regard to race, color, or previous servitude, regardless only of the present intellectual rating of the applicant. There are 25 or more universities, for the most part courteously so called, which were established for the benefit of the negro race. These schools, together with the higher institutions of the North, are open to colored youth. Let us now consider the relative advantages of the two classes of institutions to the negro.

It is not perhaps profitable to discuss the larger question of mixed schools, except in so far as the logical exigencies of the subject require. It offers such wide latitude for difference of opinion and friction of feeling that I would gladly avoid it altogether if the subject in hand permitted me to do so. Some notice of it here, however, is unavoidable. A stranger with a keen, inquiring, critical sense and unbiased prepossessions who should visit a community for the first time and should notice the existence of parallel courses of instruction, maintained at increased public cost and care, for different elements of population would begin to suspect that there must be some maladjustment of social forces. If, on closer scrutiny, he should find that the same distinction obtains in all the other relations of life, in business, in politics, in society, and even in religion, and that the separation in each case rested upon a racial basis, he would speedily conclude that there must be a race problem on hand. He would also be convinced that separate schools do not form an isolated distinction, but are only a part of the prevailing social status of the two races. Nor would he, if he were wise and liberal minded, rail against the existence of separate schools, knowing in the fullness of his wisdom that they were expedient just so long as the causes that make them necessary exist; seeing also that protest would be of no avail, but would serve only to engender bad feelings and harmful friction. Separate schools are not the cause, but simply one of the effects of the race problem. The effect is less than the cause. This problem will be on our hands for many a long day, and that, too, whether our schools be separate or mixed.

The advantage claimed for mixed schools is that the colored pupils gain much by contact with the white race, and that the two races being brought into close association will learn to appreciate and respect each other. It is argued, on the other hand, that where mixed schools prevail the negro teacher is excluded, and the colored pupil, accustomed to seeing all ennobling stations filled by white men and women, imbibes, consciously or unconsciously, a feeling of the inferiority of his race, and consequently loses ambition and self-confidence. The isolated instances of colored teachers, whose tenure of office is more or less precarious in such schools, do not materially relieve the situation. Some advocates of mixed schools are so enthusiastic as to claim that they will furnish a panacea for all the ills which the race suffers. Unfortunately, this roseate view is not sustained by the facts of experience. Those who believe that prejudice is not strong enough to survive class-room contact are greatly mistaken. The Jews in Germany attend the universities and rise to the highest ranks by reason of their undoubted mental endowments, and yet prejudice against them seems to abate no whit on that account. The University of Salerno, founded in Italy in the ninth century, received Jews both as students and teachers at a time when persecution against that unfortunate race was at its highest pitch.¹ There is, indeed, a democracy of letters, but its liberality of spirit is largely confined to its own domain. The inefficacy of mixed schools in our land to solve the race problem is too painfully apparent. It has nowhere been shown that they have had any appreciable effect in softening the asperities of prejudice. On the other hand, many honest observers are convinced that prejudice in the North is more hurtful than in the South, and that it is on the increase. True, it takes on another form, but only to accommodate itself to a change of circumstances. Nor have mixed schools produced such striking results for the good of the race as to justify us in ascribing to them any extravagant advantage.

No one, I presume, would undertake to justify separate schools, unless it be on the ground of expediency. The ideal school system is one in which such questions as we have been discussing do not enter, but where all elements of the population stand on an equal footing in management, instruction, and pupilage. But, unfor-

¹ Britannica Encyclopedia—Universities.

tunately, we are creatures of circumstances. We have, therefore, to deal with things as they are, and not as we fancy they ought to be. It is a fact which is as certain and as convincing as the law of gravitation that where the colored people form a considerable fraction of the population the races are taught in separate schools; wherever there is sufficient of the African element to give decided color, it is secluded and set apart. This is not a question of geographical lines and political divisions. It depends simply upon the relative weight of the colored element in the community. The negro is the weaker vessel. He can only accept, it may be with an ineffectual protest, conditions which are forced upon him. His frantic outcry against existing discriminations will have no more effect than the wail of an infant crying in the night.

There are three elements of greatness in an institution: (1) Great wealth, which enables it to secure the best equipments and facilities of instruction and to surround itself with learned professors and distinguished scholars; (2) age and scholarly tradition, filling the atmosphere with a bracing influence and intellectual tone; (3) an enthusiastic constituency and a large and widespread body of influential alumni. The better colleges of the East possess all these elements of strength. Contrasted with these, the negro colleges are young, poor, and struggling. It must not be taken for granted, however, that because a college is small and comparatively poor it can not do good and efficient work. If such an institution has sufficient funds to employ a competent faculty, and adhere to a conservative policy of restricting its energies to a definite, limited range of work, there is no reason why it might not accomplish as much in its scope as a school of greater pretensions. Success in the ordinary studies of a college curriculum does not depend so much upon large libraries and laboratories, showy and imposing surroundings, nor yet upon the exalted abilities of the professors, beyond a fair degree of competency, as upon faithfulness, diligence, efficient direction, wholesome enthusiasm, and serious purpose. The smaller college can not rival the great universities in the range and variety of courses, in the liberty, sometimes amounting to license, of electives, nor in the upper reaches of post-graduate and special lines of work. The mission of the small college is to do faithful and efficient work along definite if somewhat limited lines, stamping a deep moral and intellectual impress upon its products; to turn out handmade instead of manufactured articles, not hiding the man in the multitude. Many of the best scholars and most prominent citizens are products of feeble colleges.

The colored student is drawn to the Northern university because of the imposing surroundings and the attractive power of a great name. His ambition is indeed noble, his motive worthy. It is also true that the colored man who attends a white school seems to gain, for a time at least, an enhanced preferment among his own race. This can be explained partly because of his supposed superior equipment and partly on the same ground that a New Englander, in years gone by, who had visited the national capital was looked upon with something of bewilderment by his less fortunate associates. The old doggerel couplet, though wanting perhaps in dignity, is not without direct applicability:

How much a monkey that has been to Rome
Excels a monkey that has stayed at home.

The colored youth from the South, on entering a Northern institution, finds himself in such different relations to white men from those which he has been accustomed to sustain (and which, alas, he is not destined to sustain again) that he is often carried beyond himself by the first heat of enthusiasm. In the minds of many the fear exists that the Southland may be thus decimated of its best intelligence and strength. This would indeed be regretful—a sheer waste of energy. The negro, under the present circumstances, can add nothing to the civilization of the North. If the intelligence and vigorous manhood of the colored race be thus

wasted in unprofitable fields, the negro youth would take to the North that which does not enrich it, but would rob the race in the South of that which leaves it poor indeed. Education should not cause the recipient to shrink from duty, however difficult or disagreeable, but to meet it manfully and to bring all of one's added mental resources to bear upon its accomplishment. The claim of the colored colleges is advocated on several grounds:

1. The existence of a colored college does not prevent those colored youth who prefer to do so from going to Northern institutions. It rather stimulates them to go. There has recently been planted at Washington the Catholic University of America, but that does not imply that all Catholic students will forthwith cease to attend Protestant schools. Denominational institutions never include all the students of a particular faith. It need not be supposed, then, that negro schools must include all negro pupils. It would be a great misfortune if the colored race were cut off from intellectual contact with the Caucasian. The negro has not yet learned a tithe of what the white man can teach him. The time has not yet come for a declaration of intellectual independence. I adopt for the purposes of this argument the words of the late W. W. Patton, D. D., LL. D., president of Howard University. "But," he says in his inaugural address, "to secure this result (the higher education of the negro), so difficult and yet so essential, the process must be such as to throw the colored man under every possible quickening influence. Hence it is not best to separate him carefully from his white brother and raise him in an institution by himself, like a tender plant in a hothouse. He needs the contact with the more advanced race. The acknowledgment of his manhood thus given will add to his self-respect and will fire his nobler ambition."¹

I will venture the proposition that the most wholesome and beneficial contact between the races in the schools is to be found in those cases where the colored student has first passed through some first-class negro college, and afterwards goes to a Northern institution for work in special lines or professional equipment. This view is borne out partly by facts of experience and partly by considerations of a general nature. So far as the results of experience are concerned, let each look around and judge for himself. On general principles, it might be said, the graduate of the colored school has been trained in the atmosphere in which his future lot must be cast. He is impressed on every hand by the vast magnitude of the work which awaits him. If urged on by a desire to extend his knowledge in a greater school, he does so with the fixed purpose of applying his wider acquisitions to the needs of his race. He has also a definite attachment to some school as his alma mater; his zeal for the advancement of education is thus localized and heightened. Mr. S. W. Powell, writing in the *Century Magazine* on a topic of like import, says: "By getting their education where they would be brought face to face with the heartbreaking destitutions of their race, they would be more apt to acquire the enthusiasm and fixed purpose of the missionary. Lack of these is one of the most marked defects of the negro who has a little education. Unless these qualities are developed in those of higher gifts and attainments the task of elevating the race will be much more formidable." Graduates of colored schools, having reached a considerable degree of maturity and soberness, are not likely to be carried away by false enthusiasm and lose their racial balance because of a quasi equality with white men, artificially fostered, and destined to last only for a day. The graduates of these schools should not limit their further search after knowledge to American schools, but should be encouraged to go to the English, German, and French universities, and to gather the sparkling gems of knowledge wherever they glitter.

2. The colored college serves to develop negro scholarship by giving members of the race an opportunity to make their education effective. The scholar must have

¹ Inaugural address as president of Howard University.

time, leisure, and opportunity to observe, study, and reflect. Many usually finish their education, in the strict literary sense, at the college commencement, unless, luckily, their vocation in life calls for constant literary activity. A college is a seat, and not merely a dispensary of learning. It is not more a distributing center than a depository of knowledge. The mission of the college professor is not merely to teach, but to study, to investigate, and to grow. The great minds of Europe are gathered in the universities. Harvard, Yale, and Princeton mean most to American scholarship. If the negro student is to be permitted to go to the universities, but is to be given no opportunity to develop beyond graduation, the intellectual status of the race will always be low.

One of the striking peculiarities of the colored race is that its members are not inspired by the great achievements of white men. It seems to be taken for granted that the Caucasian should do great things. The negro seems to think that the white man is removed from his plane of competition. It seldom, if ever, occurs to the colored pupil to equal or surpass his white teacher. He is at most a pupil, never a disciple of his Caucasian master. But when one colored man rises, every other colored man begins to look upward. The negro does not care how far the white man outstrips him, but will do his level best to keep pace with one of his own color. There should be colored men of approved character, culture, and racial enthusiasm conspicuously at the front in these schools of higher learning. They stand out before the students as a typical embodiment of the possibilities of their kind. The abolition of the negro college would be the death knell of the higher education of the race. Colored youth would soon cease to attend Northern colleges if there were no stimulus beyond the commencement. The negroes of the North have often been upbraided for not taking better advantage of the educational facilities by which they are surrounded. They answer this reproach with the query, "Cui bono?" Let us notice the harmful effect of this principle when applied to another situation. In a publication of the Bureau of Education, entitled *Education in Maryland*, the author attributes the backwardness of that State in higher educational matters, until quite recently, largely to the fact that in the early history of the colony the youth were sent abroad for their higher education, to the neglect of home institutions. Some went to William and Mary in Virginia, others to England, and still others of Catholic parentage, like Charles Carroll, were educated on the continent of Europe.

3. "Practical education" is the cant phrase of the hour. Let us repudiate the cheap sentiment that all negroes should be taught a mechanical trade. What is here meant by a practical education is one that will enable the recipient to deal wisely with the issues which he must grapple with in after life. One's education should, as far as possible, fit for the special circumstances of his environment. Dr. Edward W. Blyden, the world-renowned negro scholar, tells us: "The object of all education is to secure growth and efficiency, to make a man all that his natural gifts will allow him to become, to produce self-respect, a proper appreciation of our own powers and the powers of other people, to beget a fitness for one's sphere in life and action, and an ability to discharge the duties it imposes."¹ The negro's "sphere of life and action" in this land is well known. The American negro may attempt great works, may plant fields and build houses, may gather silver and gold and the precious treasures of the earth—yea, may turn himself to the pursuit of wisdom and surround himself with the highest delights known to the sons of men—but unless he measures it all by the gauge of his racial circumstances he will find that it is all vanity and vexation of spirit. During the civil war all of the moral, mental, muscular, and material resources of the North were called into use to defend and uphold the Union. The skilled mechanic must build ships and devise engines of war; the chemist must invent destructive com-

¹ *Islam and the Negro Race*, p. 85.

pounds; the philosopher must uphold the theory of the government in dispute by his erudition; the scholar must write books and the poet must sing songs full of the Union sentiment and patriotic devotion. The negro race is in the midst of a life and death struggle for a higher existence, for racial development and manly recognition. All available powers need to be impressed into service. The colored college is necessary in order that the youth may be educated consciously and enthusiastically as to the needs of the race.

4. The courses of study in the Northern colleges do not contemplate the needs of the negro. They were made out without reference to him, and indeed without any thought that he would ever participate in them. These may include subjects which to the negro student's manly instinct and sense of self-respect are worse than a chilling blast. In one of the most liberal of American universities there is, or was, a distinguished professor who is the author of a book which sinks the negro to the lowest depths of degradation, from which, according to its learned dictum, he shall be lifted nevermore. Think of a self-respecting colored student learning the science of man from such a source! I can more easily think of a Baptist minister putting his children under the tutelage of a Jesuit priest, or a Union general during the war sending his son to school in South Carolina. Quoting Dr. Blyden once more: "In all English-speaking countries the mind of the intelligent negro child revolts against the descriptions—given in elementary books, geographies, travels, histories—of the negro; but though at first he experiences an instinctive revulsion from the caricatures and misrepresentations, he is obliged to continue, as he grows in years, to study such pernicious teachings. After leaving school he finds the same thing in newspapers, in reviews, novels, in quasi scientific works, and after a while, *sæpe cadendo*, they begin to seem the proper thing to say about his race."¹ There is to the colored race a baneful influence lurking in that literature which sets forth the negro in every mood and tense of contempt.

The Southern white people, if we omit a single issue, possess many admirable traits and qualities. Their sense of self-respect is most highly commendable. No Southerner would send his child to a school where any doctrine was taught repugnant to his sense of dignity and self-esteem. No text-book reflecting in any way on Southern character can be introduced into their schools.

The new woman, clamoring for what she considers to be her rights, has learned the same lesson. No institution is too venerable, no book too sacred to be attacked, if in her opinion it degrades and humiliates her sex. She has rendered a new interpretation of the Bible itself in accordance with the new notion of the dignity and elevation of womanhood. A distinguished bishop of an influential denomination has suggested a new rendering of the sacred book in its reference to the negro. All these parties are doubtless extreme in their sensitiveness, but the whole trend of manhood is to accept nothing that insults one's own soul. The negro university, then, in its fuller development, can be a bulwark of strength to the race as a friendly interpreter of science and learning.

5. It would be very unfortunate if the negro in Texas who desired a higher education should have to go all the way to Massachusetts to procure it. Should there not be some higher institutions of learning accessible to him nearer home? Emperor Frederick II gave as his reason for founding the University of Naples in 1225 that his subjects in his Kingdom of Naples should find in the capital adequate instruction in every branch of learning and "not be compelled in the pursuit of knowledge to have recourse to foreign nations or to beg it in other lands."²

6. It is not wise to depend wholly upon the Northern institutions for the higher education of colored youth. It can not be predicted at what point they may fail. Prejudice is a capricious frenzy. It obeys no law and is subject to no rational principle. Its slightest whim will put to naught our profoundest plans and pur-

¹Islam and the Negro Race, p. 88.

²Encyclopedia Britannica—article Universities.

poses. It is impossible to make the operation of prejudice conform to the formulas of logic. It is illogical and inconsistent and cares nothing for the discomfiture of its victim. If prejudice orders it so an institution will close its doors to the negro to-morrow, notwithstanding it received him yesterday with open arms. Can anyone predict what would be the policies of the universities of the North should the negro contingency become "too numerous?" Dr. J. E. Rankin, president of Howard University, in a notable utterance before the second Mohawk Conference on the Negro Question, tells us: "It is true that colored men can go to Northern institutions of learning; that is, as an individual—one of him. But ten of him would break up any college class. Even Harvard would cease to elect him class orator. He can not be educated in large numbers except in institutions established for his benefit. Christian as are our theological seminaries, I believe that the white students of a class would regard one colored man as a curiosity, a phenomenon, and two colored men as a double enigma, but ten colored men would put 10,000 of them to flight."¹

7. It is objected that separate institutions tend to perpetuate prejudice. There is time and patience for but a word to objectors of this class. The best possible way to perpetuate prejudice is for the negro to do nothing and to have nothing, but to live like the sponge and the parasite. If the time is to come when the foundations of prejudice are to be broken up, separate institutions, especially if they be good ones, will not stand in the way. The wisest way to break down prejudice, if that is possible to be done, is for the negro to have something which white men want and not always be wanting something which they have.

IX. COLORED MEN IN THE PROFESSIONS.

In a homogeneous society where there is no racial cleavage, only the select members of the favored class occupy professional stations. In India it is said that the populace is divided horizontally by caste and vertically by religion; but in America the race spirit serves both as a horizontal and vertical separation. The isolation of the negro in all social and semisocial relations necessitates independent ministrative agencies from the lowest to the highest rungs on the ladder of service. It is for this reason that the colored race demands that its preachers, teachers, physicians, and lawyers shall be for the most part men of their own blood and sympathies. Strangely enough this feeling first asserted itself in the church—that organization founded upon the universal fatherhood of God and brotherhood of man. In the estimation of its founder there is neither Jew nor Greek, Barbarian, Scythian, bond nor free. According to a strict construction of its requirements, there is no difference in kind among those who are spiritually akin. And yet the organic separation of the races first asserted itself in the matter of religion. Whenever the colored adherents became sufficiently large to excite attention, they were set apart, either in separate communion or in separate assignment of place in the house of worship. When the negro worshiper gained conscious self-respect, he grew tired of the back pews and upper galleries of the white churches, and sought places of worship more compatible with his sense of freedom and dignity. Hence arose the negro church and the negro clergy. This was the first professional class to arise, and is still relatively the most numerous. The religious interests of the race are almost wholly in the hands of the colored clergy. Outside of the Catholic Church it is almost as difficult to find a white clergyman over a colored congregation as it is to meet with the reverse phenomenon. The two denominations, Methodists and Baptists, that are wholly under negro ecclesiastical control, include well-nigh the entire colored race.

The proportional number of church communicants for the colored race exceeds

¹ Report of second Mohawk Conference on the Negro Question.

that for the white race. In 1890 the colored race had one communicant for every 2.79 of the negro population, while the whites had one out of every 3.04.

The negro church communicants were distributed as follows among the several religious denominations:

Regular Baptists	1,348,989
African Methodist Episcopal	452,725
African Methodist Episcopal Zion	349,788
Methodist Episcopal	246,249
Colored Methodist Episcopal	129,383
Regular Baptist North	35,221
Disciples of Christ	18,578
Primitive Baptist	18,162
Presbyterian (Northern)	14,961
Roman Catholic	14,517
Cumberland Presbyterian	12,956
Other denominations (17)	34,443
Total	2,673,977

This vast host of church members is, as above stated, almost wholly under colored ecclesiastical control. There is need for at least 25,000 trained men to administer to the spiritual needs of this multitude. Herein lies one of the most powerful arguments for the higher education of select members of the negro race. The tendency of the times is to require of candidates for the professions sound academic training as a preparatory basis for their professional equipment. It is idle to say that because the negro race is ignorant and undeveloped therefore its clergy need not measure up to the average of professional requirements. It surely requires as much discretion, resourcefulness, and sense to meet the needs of the lowly as to administer to those who are already exalted. It is true that the negroes have been gathered in the church in great multitudes under the guidance of men who had little academic equipment for their work; but we know full well that this is but the first step in their spiritual development, and that their future welfare requires not only men of consecration, but men of definite training for their work. Let us not forget also that the negro church has a larger function than the white church. Therefore the negro preacher must be not only the spiritual leader of his flock, but also the general guide, philosopher, and friend.

The rise of the colored teacher is due almost wholly to the outcome of the civil war. The South soon hit upon the plan of the scholastic separation of the races, and assigned colored teachers to colored schools as the best means of carrying out this policy. Hence a large professional class was at once injected into the arena. As the negro preacher is responsible for the spiritual life of the race, so the negro teacher is charged with its intellectual enlightenment. The 2,000,000 negro children of school age constitute the charge committed to the keeping of 30,000 negro teachers. There were at the inception a great many white laborers who generously entered upon this work, of whom there still remains a goodly sprinkling. But their function was and is mainly to prepare colored men and women for the responsible tasks. It was inevitable that many of the teachers, for whom there was such a sudden demand, should have been illy prepared for the task imposed. It was and still is in many cases a travesty upon terms to speak of such work as most of these teachers were able to do as professional service. We find here as strong an argument for the secondary and higher education of the negro as was furnished by ecclesiastical necessities. The duty imposed upon negro teachers is as onerous and requires as high a degree of knowledge and professional equipment as that imposed upon any other class engaged in educational work.

The special needs of their constituency call for a higher rather than a lower order of training, preparation, and fitness.

The colored doctor and lawyer have only recently entered the field in anything like sufficient numbers to attract attention. The same spirit that demanded the negro preacher has also operated in favor of the negro doctor. The relation between patient and physician is close and confidential. The social barrier between the races often operates against the acceptability of a physician of the oppositerace. The success of the colored physician has often been little less than marvelous.

The colored lawyer has not been so fortunate as his medical confrere. The relation between client and attorney is not necessarily close and personal, but partakes of a business nature. The client's interest is also dependent upon the court and jury, with whom the white attorney is generally supposed to have greater weight and influence. For such reasons the negro lawyer has not made the headway that has been accomplished in the other professions.

It must be said for the professions of law and medicine that the applicants are subjected to a uniform test, and therefore colored and white candidates are on the same footing. Colored practitioners, therefore, must have a fair degree of preliminary training and professional preparation.

Macon B. Allen was the first colored attorney regularly admitted to practice in the United States. He was admitted in Maine in 1844. It is claimed by some that the husband of Phyllis Wheatley was a lawyer. Robert Morris was admitted to the Boston bar in 1850, on motion of Charles Sumner, where he practiced with splendid success until his death, in 1882. Prof. John M. Langston was admitted to the Ohio bar in 1854. James Durham was born a slave in Philadelphia in 1762. His master was a surgeon. He purchased his freedom and became one of the most noted physicians in New Orleans. His practice is said to have been worth \$3,000 a year. The following account attests the success of a black physician:

Dr. David Ruggles, poor, blind, and an invalid, founded a well-known water-cure establishment in the town where I write (Northampton, Mass.), erected expensive buildings, won fashionable distinction as a most skillful and successful practitioner, secured the warm regard and esteem of this community, and left a name established in the hearts of many who feel that they owe their life to his skill and careful practice.¹

Dr. John V. Degraas was admitted in due form as a member of the Massachusetts Medical Society in 1854.

The above are only samples of negroes in the learned professions before the civil war. Of course, there was a larger number of ministers and teachers. Out of such meager beginnings has grown the great number of professional colored men and women of to-day.

The number and distribution of colored and white men among the different professions for the sixteen former slave States and the District of Columbia can be seen from the following table:

Professional occupations.²

ALABAMA.

Profession.	Number.		Number of persons to each.	
	White.	Colored.	White.	Colored.
Teachers	3,188	946	262	718
Doctors	1,798	28	464	24,618
Lawyers	1,298	13	642	52,254
Clergymen	1,046	799	799	850

¹ Wendell Phillips in introduction to W. C. Nell's *Colored Patriots of the American Revolution*, 1852.

² Eleventh Census.

Professional occupations—Continued.

ARKANSAS.

Profession.	Number.		Number of persons to each.	
	White.	Colored.	White.	Colored.
Teachers	2,792	612	293	506
Doctors	2,224	40	369	7,761
Lawyers	1,052	30	816	10,313
Clergymen	1,138	666	719	465

DELAWARE.

Teachers	677	42	207	679
Doctors	231	2	606	14,214
Clergymen	192	72	729	385
Lawyers	155	1	903	14,427

DISTRICT OF COLUMBIA.

Teachers	996	361	155	209
Clergymen	255	129	606	587
Doctors	692	37	224	2,046
Lawyers	1,375	26	112	2,911

FLORIDA.

Teachers	1,204	417	187	397
Clergymen	486	453	464	385
Doctors	620	12	363	13,873
Lawyers	561	13	401	12,896

GEORGIA.

Teachers	3,999	1,535	247	559
Clergymen	1,240	1,270	790	673
Doctors	2,343	40	411	21,475
Lawyers	1,713	17	-----	50,529

KENTUCKY.

Teachers	7,290	711	218	377
Clergymen	1,897	651	838	412
Doctors	3,214	42	495	6,385
Lawyers	2,339	14	680	19,155

LOUISIANA.

Teachers	2,818	628	198	892
Clergymen	524	639	1,061	871
Doctors	1,212	38	467	14,926
Lawyers	1,040	30	537	15,339

MARYLAND.

Teachers	4,595	382	180	565
Clergymen	1,188	287	696	752
Doctors	1,663	37	497	5,563
Lawyers	1,161	23	712	8,592

Professional occupations—Continued.

MISSISSIPPI.

Profession.	Number.		Number of persons to each.	
	White.	Colored.	White.	Colored.
Teachers	3,157	1,546	173	483
Clergymen	814	989	608	758
Doctors	1,624	34	335	21,965
Lawyers	872	26	626	28,644

MISSOURI.

Teachers	13,689	546	189	276
Clergymen	3,439	402	735	375
Doctors	5,225	23	484	5,383
Lawyers	3,943	8	641	18,591

NORTH CAROLINA.

Teachers	3,679	1,091	287	516
Clergymen	1,355	855	762	658
Doctors	1,488	46	709	12,229
Lawyers	978	14	1,079	40,183

SOUTH CAROLINA.

Teachers	2,130	889	217	775
Clergymen	747	876	618	787
Doctors	1,069	30	420	22,971
Lawyers	748	23	617	29,963

TENNESSEE.

Teachers	5,485	1,093	245	394
Clergymen	1,862	812	712	531
Doctors	3,283	102	407	4,224
Lawyers	1,562	76	856	5,669

TEXAS.

Teachers	7,388	1,473	236	332
Clergymen	2,518	836	694	586
Doctors	4,283	54	408	9,068
Lawyers	3,540	12	493	40,799

VIRGINIA.

Teachers	6,026	1,459	169	435
Clergymen	1,417	747	720	851
Doctors	1,892	39	539	16,253
Lawyers	1,611	38	633	16,733

WEST VIRGINIA.

Teachers	3,823	134	191	244
Clergymen	910	77	802	425
Doctors	1,022	4	714	8,179
Lawyers	935	2	789	16,358

The colored preachers are quite as numerous in proportion to the population as the white, and in some cases more so. In West Virginia there are 425 whites and

only 802 blacks to each minister of the respective races. One might expect a preponderance of colored ministers for two reasons: (1) There is a larger relative church membership; and (2) the colored population has not more than half the density of that of the white in the area under consideration. In the State of Missouri, for example, 735 colored preachers cover the same territory as 3,439 white ministers; and while each of the former has on an average 375 persons to the parish to the latter's 735, yet his geographical area is five times as extensive. If we turn to the States where the negroes predominate, we may expect to find a reversal of conditions. In Mississippi and South Carolina the colored parish is smaller in area but more populous than that of the whites. The clerical demand of the negro population is fully supplied in a numerical sense, albeit there is much need for a higher standard of professional equipment for its most arduous and delicate duties.

In no case has the colored race as many teachers in proportion to the population as the white. In some cases, like South Carolina and Alabama, the disproportion is glaring, the number of persons to each teacher being 217 to 775 in the former, and 262 to 718 in the latter, in favor of the more fortunate race. It must be said, however, that the number of persons to each teacher does not necessarily represent the actual distribution of the work between the races; for it is known that in every Southern State there are white teachers working among colored people. These are mainly in private and philanthropic schools, however, and do not materially affect the general equation, or rather the inequality, of educational conditions. If we take geographical conditions into account, and the fact that the two sets of teachers operate over the same area, it will be seen that the disparity is greatly enhanced. Taking all in all, it appears that the negro teaching force is in no sense adequate to the task imposed upon it.

The colored lawyers and doctors form so small a proportion of the general population as scarcely to merit mention as a professional class. In Texas there is 1 negro doctor in 9,000 and 1 negro lawyer in 40,000 of the population, while in South Carolina there are 22,000 and 29,000 to a colored practitioner in the respective professions. In Alabama there is 1 black doctor to look after 24,000 patients, and each colored lawyer has 52,000 clients. The work in these professions is conducted mainly by the whites, although the Twelfth Census will undoubtedly show a large increase in the colored practitioners. Where numbers are small, proportions are sensitive. The number of persons to each practitioner will be materially reduced. The argument which we sometimes hear that negroes are leaving the farm and the shop to rush into the learned professions is not borne out by the collected facts in the case. In Alabama, for instance, only 1 negro in 50,000 has entered upon the practice of law and 1 in 25,000 upon the profession of medicine. While it is true that there is no large demand for colored men in these professional pursuits, especially outside of the large centers, nevertheless the steady progress of the people in property, intelligence, and diversified material and commercial interests calls for a conservative increase in the number of professional colored men both in medicine and in law.

It can not be claimed that the colored race has developed superlative names in the several professions. There are not a few ministers of piety and eloquence. The teacher in the public service must maintain the average proficiency of the system to the satisfaction of the white superintendents. The negro lawyers are in open competition with their white collaborators, and must render satisfactory service, else they would have no clients. Colored physicians generally have a good record for professional skill and integrity. There is no movement affecting the lot and life of the colored race so suggestive of its educational needs as the size of the professional class.

X. NEGROES WHO HAVE ACHIEVED DISTINCTION ALONG LINES CALLING FOR DEFINITE INTELLECTUAL ACTIVITY.

The individual is the proof of the race, the first unfoldment of its potency and promise. The glory of any people is perpetuated and carried forward by the illustrious names which spring from among them. As we contemplate the great nations and peoples, whether of the ancient or of the modern world, their commanding characters rise up before us, typifying their contribution to the general welfare of the human race. On the contrary, no people can hope to gain esteem and favor which fails to produce distinguished individuals illustrative and exemplary of its possibilities.

For four centuries the African race has been brought in contact with the European in all parts of the globe. This contact has not been of an ennobling character, but of the servile sort, affording little opportunity for the development of those qualities which the favored races hold in esteem. And yet there has arisen from this dark and forbidden background not a few striking individual emanations. This race, through a strain of its blood, has given to Russia her national poet and to France her most distinguished romancer. Toussaint L'Ouverture, the negro patriot, is the most commanding historical figure of the entire West Indian Archipelago. In South America persons of negro blood have gained the highest political and civil renown.

The Anglo-Saxon deals with backward peoples on a different basis from the Latin races. While he has a keener sense of justice and is imbued with a spirit of philanthropic kindness, yet he builds up a barrier between himself and them which it is almost impossible to overcome. To him personal solicitude and good will and racial intolerance are not incompatible qualities. On the other hand, the Latin races, while possessing a much lower order of general efficiency, accept on equal terms all who conform to the prevailing standards. Under the Latin dispensation color offers not the slightest bar to the individual who exhibits high qualities of mind or soul. We need not be surprised, therefore, to find that the colored men who have reached the highest degree of fame should have sprung from the Latin civilization. The persons of African blood who are most nearly comparable with names of the first order of renown among Europeans are Toussaint L'Ouverture, of Haiti; Alexander Pushkin, of Russia; Alexander Dumas, of France. In France, Italy, or Spain color is only a curious incident. The Afro-American therefore belongs in a category by himself. His circumstances and conditions are so different from those of his European brother that although of same color they are not of the same class.

Several lists of distinguished colored men have been prepared, the most important of which, perhaps, was published by Abbé Grégoire, and was prepared to answer the argument of Thomas Jefferson and others, who undertook to prove the negro's intellectual inferiority. This work contains accounts of negroes in all countries who had reached eminence and distinction in all lines of endeavor.¹ An account of the part played by colored men in the Revolutionary war contains the deeds and achievements of noted negroes.² Rev. William J. Simmons brings the former work nearer to date and includes many colored men now living.³ A list of distinguished colored women has also been compiled.⁴

Numerous magazine articles have appeared on this subject from time to time.

¹ De la littérature des Nègres, ou Recherches sur leur facultés intellectuelles, leur qualités morales, et leur littérature; suivies par notices sur la vie et les ouvrages des Nègres qui se sont distingués dans les sciences, les lettres et les arts. Par H. Grégoire. Paris, 1808.

² Colored Patriots of the American Revolution, by William Cooper Nell, with introduction by Harriet Beecher Stowe. Boston, 1855.

³ Men of Mark, 1141 pages, by William J. Simmons, D. D. Cleveland, 1887.

⁴ Women of Distinction, by A. L. Scruggs, M. D. Raleigh, 1893.

The two which are, perhaps, of the greatest importance, and which include the substance of the rest, appeared in the *International Quarterly Review*¹ and in the *North American Review*²

An interesting syllabus has recently been prepared by Mr. A. O. Stafford on "Negro ideals," which gives a good outline of the efforts of the negro toward better things.³

It is with some hesitancy that a few names of the more distinguished Afro-Americans are here presented. In such a restricted list it is inevitable that many should be omitted who are equally worthy as some who are mentioned. The names here presented have not been selected because of general distinction, but rather for technical, artistic, and intellectual achievements in the scholastic sense.

Only those have been included of whose achievements the world takes account. There is no name in the list which may not be found in Appleton's *Cyclopedia of American Biography*. Nothing is great or small except by comparison. The names here presented are at least respectable when measured by European standards. It is true that no one of them reaches the first, or even the second degree of luster in the galaxy of the world's greatness. The competing number has been so insignificant and the social atmosphere has been so repressive to their budding aspirations that it would be little short of a miracle of genius if any member of this race had reached the highest degree of glory. It is true that if not one of these had ever been born the bulk and quality of science, literature, and art would not be appreciably affected.

While these contributors must be measured in terms of European standards in order that there may be a sane and rational basis of comparison, yet there is another measure which takes account of the struggles and strivings out of which they grew. In the light of European comparison it appears that they represent more than the marvelous vision of a one-eyed man among the blind, but rather the surprising visual power of a one-eyed man among two-eyed men. The significance of these superior manifestations, however, must not be measured solely by their intrinsic value. They serve both as an argument and an inspiration. They show the American people that the negro, at his best, is imbued with their own ideas and strives after their highest ideals. To the negro they serve as models of excellence to stimulate and encourage his hesitant and disheartened aspirations.

One will be struck by the versatility and range of the names in the list. They cover well-nigh every field of human excellence. It will be noticed that the imitative and esthetic arts predominate over the more solid and severe intellectual acquisitions. Is this not the repetition of the history of culture? The poet and the artist precede the scientist and the engineer. This meager fruitage does not furnish cause of self-complacent glorification on the part of the negro, but is only an index of the promise of the tree of which they are the initial bearings. With its extended range and scope, the rising generation can look upon them in the light of promise rather than fulfillment.

That which they have done but earnest of the things that they shall do.⁴

Phyllis Wheatley was born in Africa and was brought to America in 1761. She was bought from the slave market by John Wheatly, of Boston, and soon developed remarkable acquisitive faculties. In sixteen months from her arrival she could read English fluently. She soon learned to write, and also studied Latin. She visited England in 1774 and was cordially received. After returning to Boston

¹ "The intellectual position of the negro," by Prof. Richard T. Greener. *International Quarterly Review*, July, 1880.

² "Negro intellect," by William Matthews. *North American Review*, July, 1889.]

³ Hampton Sumner Normal Institute Papers, July, 1901.

⁴ Tennyson's "Locksley Hall."

she corresponded with Countess Huntington, the Earl of Dartmouth, Rev. George Whitfield, and others, and wrote many poems to her friends. She addressed some lines to Gen. George Washington, which were afterwards published in the *Pennsylvania Magazine* for April, 1776. General Washington wrote a courteous response and invited her to visit the Revolutionary headquarters, which she did, and was received with marked attention by Washington and his officers. Her principal publications are *An Elegiac Poem on the Death of George Whitfield; Poems on Various Subjects, Religious and Moral*, published in London in 1773, and republished as *The Negro Equalled by Few Europeans*, two volumes, Philadelphia, 1801. The letters of Phyllis Wheatley were printed in Boston in 1864, collected from the proceedings of the Massachusetts Historical Society.¹

Benjamin Banneker was born November 9, 1731, near Ellicotts Mill, Md. Both his father and grandfather were native Africans. He attended a private school which admitted several colored children along with the whites. Although his early educational facilities were scanty, young Banneker soon gained a local reputation as a miracle of wisdom. In 1770 he constructed a clock to strike the hours, the first to be made in America. This he did with crude tools and a watch for his model, as he had never seen a clock. Through the kindness of Mr. Ellicott, who was a gentleman of cultivation and taste, he gained access to his valuable collection of books, and was thus inducted into the study of astronomy. In this study he gained great proficiency and constructed an almanac adapted to the local requirements of Pennsylvania, Virginia, and Maryland. This was the first almanac constructed in America, and was published by Goddard & Angell, Baltimore. Banneker's Almanac was published annually from 1792 to 1806, the year of his death. It contained the motions of the sun and moon; the motions, places, and aspects of the planets; the rising and setting of the sun, and the rising, setting, southing, place, and age of moon, etc., and is said to have been the main dependence of the farmers in the region covered. He lived mainly from the royalty received from this publication. Banneker sent a copy of this almanac to Thomas Jefferson, which elicited a flattering acknowledgment on the part of the philosopher and statesman. Banneker assisted the commissioners in laying out the lines of the District of Columbia. A life of Banneker was published by Hon. J. H. B. Latrobe, Baltimore, 1845, and another by J. S. Norris, 1854.² That Thomas Jefferson believed in the intellectual capacity of the negro and appreciated the force of the argument that the treatment of this race found justification in its assumed low state of mental possibility is revealed by his letter to Benjamin Banneker, the black astronomer:

SIR: I thank you sincerely for your letter of the 19th instant and for the almanac it contained. Nobody wishes more than I do to see such proofs as you exhibit that nature has given to our black brethren talents equal to those of the other colors of men, and that the appearance of a want of them is owing merely to the degraded condition of their existence, both in Africa and America. I can add with truth that nobody wishes more ardently to see a good system commenced for raising the condition both of their body and mind to what it ought to be as fast as the imbecility of their present existence and other circumstances which can not be neglected will admit. I have taken the liberty of sending your almanac to M. de Condorcet, secretary of the Academy of Sciences at Paris and member of the Philanthropic Society, because I considered it as a document to which your color had a right for their justification against the doubts which have been entertained of them.

I am, with great esteem, sir,

Your most obedient humble servant,

THOMAS JEFFERSON.

Mr. BENJAMIN BANNEKER.

*Near Ellicotts Lower Mills, Baltimore County.*³

¹ See Appleton's *Cyclopedia of American Biography*, Vol. VI, pp. 449, 450.

² Williams's *History of the Negro Race*, Vol. I, pp. 385-398.

³ Jefferson's *Works*, Vol. III, p. 291.

Lemuel Haynes was born in Hartford, Conn., July 18, 1753. His father was an African, his mother a white woman. He received the honorary degree of A. M. from Middlebury College in 1804. After completing a theological course he preached in various places and settled in West Rutland, Vt., in 1788, where he remained for thirty years and became one of the most popular preachers in the State. He was characterized by a subtle intellect, keen wit, and eager thirst for knowledge. His noted sermon from Genesis 3 and 4 was published and passed through nine or ten editions. His controversy with Hosea Ballou became of world-wide interest. The life of Lemuel Haynes was written by James E. Cooley, New York, 1848.

Ira Aldridge was born at Belaire, Md., about 1810.¹ There is some dispute as to the exact composition of his blood, some claim that he was of pure African descent, while others contend that he was of mixed extraction. He was early brought in contact with Mr. Kean, the great tragedian, and in 1826 accompanied him to Europe. Mr. Kean encouraged his dramatic aspiration, and on one occasion, at least, permitted him to appear as Othello, while he himself took the part of Iago. As an interpreter of Shakespeare he was very generally regarded as one of the best and most faithful. He appeared at Covent Garden as Othello in 1833, and in Surrey Theater in 1848. On the Continent he ranked as one of the greatest tragedians of his time. Honors were showered upon him wherever he appeared. He was presented by the King of Prussia with the first-class medal of arts and sciences, accompanied by an autograph letter from the Emperor of Austria; the Grand Cross of Leopold; a similar decoration from the Emperor of Russia, and a magnificent Maltese cross, with the medal of merit, from the city of Berne. Similar honors were conferred by other crowned heads of Europe. He was made a member of the Prussian Academy of Arts and Sciences and holder of the large gold medal; member of the Imperial and Arch Ducal Institution of Our Lady of the Manger in Austria; of the Russian Hof-Versammlung of Riga; honorary member of the Imperial Academy of Arts and Sciences in St. Petersburg, and many others. Aldridge appeared with flattering success in Amsterdam, Brussels, Berlin, Breslau, Vienna, Pesth, The Hague, Dantzic, Königsberg, Dresden, Berne, Frankfort-on-the-Main, Cracow, Gotha, and numerous other cities in the leading parts of the standard plays of the times. He was an associate of the most prominent men of Paris, among whom was Alexander Dumas. When these two met they always kissed each other, and Dumas always greeted Aldridge with the words "*mon confrère*." Aldridge died at Lodz, in Poland, 1867.

Col. George W. Williams was born in Pennsylvania in 1849. He was educated in public and private schools and completed his theological training at West Newton Theological Seminary. His *History of the Negro Race in America* is the sole existing authority on the subject of which it treats, and forms, without doubt, as valuable a literary monument as any yet left by a colored man.

Paul Laurence Dunbar is still a young man under 30 years of age. He has already made an impression on American literature that can never be effaced. He has published *Oaks and Ivy*, *Majors and Minors*, *Lyrics of Lowly Life*, and *Lyrics of the Hearthstone*, together with half a dozen volumes of fiction and short stories. Several of his works have been reprinted in England. Speaking of his early poems, William Dean Howells says: "Some of these [poems in literary English] I thought very good. What I mean is, several people might have written them, but I do not know anyone else at present who could quite have written his dialect pieces. There are divinations and reports of what passes in the hearts and minds of a lowly people whose poetry had hitherto been inarticulately

¹ There is some dispute as to the exact date of his birth; 1804 is the time given by Simmons in *Men of Mark*.

expressed, but now finds, for the first time in our tongue, literary interpretation of a very artistic completeness."¹

Henry O. Tanner, son of Bishop B. T. Tanner, of the African Methodist Church, was born in Pittsburg, Pa., in 1859. His early educational opportunities were good, having studied at the Pennsylvania Academy of Fine Arts, and subsequently at Paris. His pictures have been hung on the line in many a salon exhibition, and now the Government of France has crowned the long list of medals and prizes which Mr. Tanner has received by buying one of his most important works, *The Raising of Lazarus*, for the Luxemburg Gallery. The picture has already been hung in the Luxemburg Gallery, and in the course of time will naturally be transferred to the Louvre. Other notable pictures by the same artist are *Nicodemus*, owned by the Academy of Fine Arts, Philadelphia; *The Annunciation*, which now hangs in the Memorial Hall, Philadelphia; the *Betrayal*, in the Carnegie Gallery, at Pittsburg.²

Dr. Daniel H. Williams, of Chicago, is widely known throughout the medical profession. He has performed several noted operations that taxed the skill of surgical science.

In 1897 Dr. Williams performed an operation on account of a stab wound of the heart and pericardium, a report of which was published in the *Medical Record*, March 27, 1897, attracted the attention of the entire medical and surgical fraternity, and was published in the medical journals of nearly every country and language. It has also been referred to in most recent works on surgery, especially in *International Text-Book on Surgery* and *Da Costa's Modern Surgery*.

An article on "Ovarian cysts in colored women," by Dr. Williams, published in the *Philadelphia Medical Journal*, December 29, 1900, had for its purpose the refutation of the idea that had been almost universal among surgeons, that colored women did not have ovarian tumors. The record of the cases collected by Dr. Williams furnishes sufficient data to sustain his contention. It is also shown in this article that the same may be said of fibrous tumors. This article has been considered of such value to the profession that it has been copied extensively in medical literature and notably in some of the best German and French medical journals.

Dr. Williams has performed various important operations that have been published in medical journals and widely commented upon in the medical world. He was surgeon in chief of the Freedmen's Hospital, at Washington, D. C., from 1893 to 1897.

Charles W. Chestnut was born in Fayetteville, N. C., about fifty years ago. He moved to Cleveland, Ohio, where he was employed as court stenographer. Mr. Chestnut has written several works of fiction which, according to competent critics, place him among the foremost story tellers of the time. *The Wife of My Youth*, *The House Behind the Cedars*, and *The Marrow of Tradition* are published by Houghton, Mifflin & Co., Boston, Mass.

Prof. W. S. Scarborough was born in Georgia in 1852, was graduated from Oberlin College in 1875, and is professor of Greek at Wilberforce University. He is a member of the American Philological Society and of the Modern Language Association. He has published *First Lessons in Greek* (New York, 1881), and the *Theory and Functions of the Thematic Vowel in the Greek Verb*.

Prof. W. E. B. Du Bois was born in Massachusetts about thirty-three years ago. He was graduated from Fisk University and subsequently from Harvard, after which he studied two years in Germany and earned his Ph. D. degree from Harvard. He has been a teacher in Wilberforce University, associate in sociology at the University of Pennsylvania, and professor of history and political economy at Atlanta University. His chief works are *The Suppression of the African Slave*

¹ Introduction to *Lyrics of Lowly Life*, by W. D. Howells.

² See "A negro artist of unique power," by Elbert Frances Baldwin, *Outlook*, April, 1900.

Trade, published in the Harvard Historical Series; The Philadelphia Negro, published under the auspices of the University of Pennsylvania, and numerous special studies and investigations that have appeared in the proceedings of the Atlanta conferences and the bulletins of the Bureau of Labor, as well as sundry magazine articles. Mr. Du Bois has done more to give scientific accuracy and method to the study of the race question than any other American who has essayed to deal with it.

It is generally believed that while the negro possesses the imitative he lacks the initiative faculty; that while he can acquire what has already been accumulated, he can not inquire into the unrevealed mystery of things. As an illustration of how easy it is for the achievements of the negro to escape his fellow-colaborers, the following incident may be regarded as typical. The Patent Office sent out circulars inquiring as to the number and extent of colored patentees. One of the leading patent attorneys responded that he had never heard of the negro inventing anything except lies; yet the Patent Office record reveals 250 colored patentees and more than 400 patents. Many of these show the highest ingenuity and are widely used in the mechanical arts.

Granville T. Woods was born in Ohio, and is 44 years old. He has more than twenty patents to his credit. Mr. Woods is the inventor of the electric telephone transmitter, which he assigned to the American Bell Telephone Company for a valuable consideration, said to amount to \$10,000. This transmitter is used in connection with all the Bell telephones.

Elijah T. McCoy, of Detroit, Mich., has taken out 30 patents, mainly devoted to the improvement of lubricating devices for stationary and locomotive machinery. His inventions are in general use on locomotive engines of leading railways in the Northwest, on the lake steamers, and on railways in Canada.

There are numerous colored people who have achieved distinction in fields calling for practical energy, moral courage, sound intelligence, and intellectual resource. Mr. Frederick Douglass and Prof. Booker T. Washington are, in general average of distinction, the most renowned of their race, although their fields of exertion are not mainly intellectual, in the academic sense of the term—and yet Mr. Douglass was one of the most eminent American orators, and his autobiography forms an integral part of the literature of the antislavery struggle; and Mr. Washington's *Up from Slavery* is one of the most popular books printed in the first year of the twentieth century. As Mr. Douglass's life is woven in the warp and woof of the great epoch ending in the civil war, so Mr. Washington's life and work have become a vital part of current educational literature, and his place in the history of education is assured.



CHAPTER XVII.

NOTICES OF SOME EARLY ENGLISH WRITERS ON EDUCATION,

WITH DESCRIPTIONS, EXTRACTS, AND NOTES.

BY PROFESSOR FOSTER WATSON,

Of University College, Aberystwyth, Wales.

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1480. *Mirror of the World* (Caxton's translation):

Hier begynneth the book called the myrrour of the worlde, etc. (W. Caxton: Westminster, 1480.) fol.

The myrrour and descrypcyon of the Worlde, etc. (reprinted with some alterations from W. C.'s translation). (1527?) fol.

Thymage, or Myrrour of the Worlde. Emprysed and Fynyshed in the xxi year of the regne of the most crysten Kyng, Kyng Edward the fourth.

The following chapters are of educational import:

	Cap.
Wherefore and how the vii Arts liberal were found, and of their order	v
Of three manner of people, and how clergy came first into France	vi
And first it speaketh of grammar	vii
After of logie	viii
And after of rhetoric	ix
And after of <i>ars metrike</i> , and whereof it proceedeth	x
After of geometry	xi
After of music	xii
And then of astronomy	xiii

Similarly in the work ascribed to John Lydgate: *The Werks (or Court) of Sapience*, 1510, 4°, there is a "distinct survey throughout the palace and domains of Sapience, of all the products of nature, in distinct chapters, and of arts and sciences; with further reference at the end of each to the authors who have written on them."

1484. *La Tour Landry* (Geoffroy de).

*Begin. Here begynneth the book whiche the knyght of the toure made, and speketh of many fayre ensamples and thensygnementys and techyng of his doughters (translated oute of Frenssh in to * * * Englysshe by W. Caxton) B. L. enprynted at Westmynstre (by W. Caxton), the last day of Ianyuer the fyrst yere of the regne of Kyng Rychard the thyrd, (1484). fol.*

(Reprinted in the E. E. T. S.'s publications, ed. by Thomas Wright, M. A., F. S. A., 1869.)

Written by Geoffroy de la Tour Landry in 1371 for his three daughters, it is essentially a "treatise on the domestic education of women." *La Tour Landry* had previously written a parallel book for the right bringing up of young men. Many of the stories which are given to incite to good conduct or to give a warning against bad conduct are taken from the Scriptures or from the lives of saints. Other stories are taken from popular tales. The collection of "ensamples" brings out very clearly the ideal of women's education at the time. The knight was assisted in his work by two priests and two clerks. The book was very popular. The first edition in English was printed by William Caxton, as stated above, in 1484.

There are sections of great interest in connection with women's education in—

Womankind in Western Europe, from the earliest times to the seventeenth century, by Thomas Wright. London, 1869. 4to.

Miss A. T. Drane, in her interesting account of "English Education in the Fourteenth Century," in *Christian Schools and Scholars*, gives the following summary of the rules for the regulation of his household drawn up by Elzear:

Every one in my family shall daily hear Mass. Let no one curse, swear or blaspheme, under pain of chastisement. Let all persons honour chastity, for no impure word or deed shall go unpunished in the house of Elzear. The men and women shall confess their sins every week, and communicate every month, or at the least at the chief festivals, viz. Christmas, Easter and Pentecost, and on the feasts of our Lady. No one shall be idle, but in the morning after prayers, let all go to their work, the men abroad, the women at home. The life of the pious woman is not merely to pray, but to ply her work, and take care of her household. Therefore, the ladies shall read and pray in the mornings, and afterwards spend their time in useful work of some kind. Every evening all my family shall assemble for a pious conference, in which they shall hear something said for the salva-

tion of their souls. And let none be absent on pretence of attending to my affairs. I have no affairs so near my heart as the salvation of those who serve me. I will have no playing at dice or games of hazard; there are plenty of innocent diversions, and time passes soon enough without being thrown away; yet I do not wish my castle to be a cloister, nor my people hermits. Therefore let them be merry but without offending God. If any quarrel fall out, let not the sun set before it be appeased. And I strictly command all under my jurisdiction to hurt no man in goods, honour, or reputation.

Miss Drane holds that this household-education of Elzear, and Delphina his wife, was not exceptional, but rather the type of that of most of the knightly houses, in which numbers of youth were received to be brought up. Dr Furnivall, in his *Forewords to Manners and Meals in Olden Times*, for the Early English Text Society (1867), gives a number of instances taken from English history. The account of the lives of Elzear and his wife appeared in English in—

The Lives and singular vertues of Saint Elzear, Count of Sabran, and of his wife, the blessed Countesse Delphina * * * Written in French by R. F. Stephen Binet, S. J. and Translated into English by Sr T. H. Lond. 1633. 8vo. (I. e., Sir Thomas Hawkins.)

Further accounts of early education in England will be found in Thomas Wright's *The Homes of Other Days: a History of Domestic Manners and Sentiments in England from the earliest known Period to Modern Times*. Lond., 1871.

Robert Henry in his *History of England* gives sections at the end of each period dealing with the learning and education of the period.

For English Home Life and Education in later times see Henry Barnard's *English Pedagogy*, 2nd Series pp. 369-400.

1486. Bernes (Juliana).

The Gentleman's Academie or The Boke of S. Albans. Compiled by J. B.

Printed by the Schoolmaster at S. Albans, 1486. Revised by Gervase Markham 1595. 4to.

(Fac-simile reprint, ed. by Wm Blades, published by Eliot Stock, London, 1881.)

The first two sections—on Hawking and Hunting—may be described as the first English treatise on courses of physical training. It is indeed curious that the first book on men's sports should be by a woman, Dame Juliana Bernes. Very little is known of this lady. She probably lived at the beginning of the 15th century. Though no doubt great credit is due to Dame Bernes for her treatises (on Hawking, Hunting and Heraldry, and, in a separate volume, on Fishing), yet they are probably founded on earlier writings. Mr Blades, very justly, drew attention to the similarity between Dame Bernes's opening verses on hunting and some lines in a small MS in the Bodleian:

Bodleian MS.

Mi dere sones, where ye fare, be frith or by fell,
Take good hede in his tyme how Tristam wol tell.

Dame Bernes.

Wheresoever ye fare, by frith or by fell,
My dear child, take heed how Tristam doth you tell.

The authoress, in the treatise on Hunting, gives an account of different kinds of beasts, and a very full nomenclature. There is also a dialogue between the master of the hunt and his man. It is worth noting that throughout the book, remarks are addressed to "my deare childe". "Do so, my child". "Think what I say, my son". "My lief childer", and so on. Clearly, as Mr. Blades points out, the portions where such expressions occur were written "for a mother to use as a school-book, which her son would learn to read, and at the same time, become familiar with the terms of venery".

As illustration of the connexion of treatises such as these with the school, it may be mentioned:

1. The schoolmaster printer supplies the "Prologues" to the Book of Hawking, the Book of Hunting, and the Book of Coat Armour.

2. The Bodleian MS, quoted above, contains as colophon, *Explicit, expliceat, ludere scriptor eat*, giving plausibility to the conjecture that the MS was "copied by a youth".

1520. Child.

Here begynneth a lytell treatyse called the wyse chylde of thre yere olde. The enfant sage beynde of thre yeres of age demaunded by Adryan Emperoure. The whiche hym answered unto everythinge he asked. B. L. Imprynted in london in Fletestrete at the sygne of the Sonne by Wynkyn de Worde (1520?) 4to.

This is a short book of little more than nine pages. Answers are given by a child of three years to questions put by the Emperor Adrian. There is no idea of appropriateness to the age of the child in the answers given, but some insight is afforded as to what knowledge was considered of most worth. One of the earliest questions asked is to explain the Trinity. The child explains by reference to the sun (curiously enough Wynkyn de Worde's sign), which contains substance, shining, and heat. The following are amongst the subjects of enquiry: Time of creation of world; chance of salvation for merchants (little); for labourers (great); number of ways a man may be saved (baptism, martyrdom, confession and penance, tears weeping, alms-deeds, indulgences, works of mercy); creation of woman; growth of the soul; the hour at which Adam ate of the forbidden tree; number of languages in the world (seventy-two is the answer, why that number is not explained); who made the first church (S. Paul); Noah's ark; the present position of the ark (in Armenia); the greatest gift ever asked by man (the body of Christ, asked by Joseph of Arimathea); the reasons for fasting on Friday (seven); the ways in which a man may be damned (four, viz., negligence, anger and open sin, doubt as to troubling over amending his sins, and to be constantly in sin); the first to sing mass (Melchisedech); the composition of man (five things "principally," viz.: the flesh is made of the slime of the earth, the blood of the water of the sea, the bones of the stones, the breath of the wind, and the soul of the Holy Ghost). The child also states the main positions of the Apostles' Creed.

1527. *Coleti Aeditio*, of the Introduction to the Latin Grammar, commonly called Lily's Latin Grammar.

John Colet is so well-known as the founder of St. Paul's School, that everyone feels sure he has only to look up his name in a catalogue to see his works. As a matter of fact, he left very little. The Rev. J. H. Lupton has assiduously and worthily gathered the little together, and published it; but Colet wrote no educational treatise. To what is known as the *Coleti Aeditio* of 1527, Colet contributed the following:

A LYTELL PROHEME TO THE BOKE.

Albeit many have written and have made certain introductions in to Latin speech, called Donates and Accidens, in Latin tongue and in English, in such plenty that it should seem to suffice. Yet nevertheless for the Love and the Zeal that I have unto the new school of Paul's, and to the children of the same, somewhat I have also compiled of the matter, and of the VIII parts of grammar, have made this little book, not thinking that I could say any thing better than hath been said before, but I took this business, having great pleasure to show the testimony of my good mind unto the school. In which little work if any new things be of use, it is alone that I have put these parts in a more clear order and have made them a little more easy to young wits than (methinketh) they were before. Judging that no thing may be too soft nor too familiar for little children, specially learning a tongue unto them all strange. In which little book I have left many things out of purpose, considering the tenderness and small capacity of little minds, and that I have spoken, also, I have affirmed it none otherwise but as it happeth most commonly in Latin tongue. For many be the exceptions, and hard it is anything generally to assure in a speech so various. I pray God all be to his

honour, and to the erudition and profit of children, my countrymen, Londoners especially, whom digesting this little work I had always before mine eyes, considering more what was for them than to show any great cunning, willing to speak the things often before spoken in such manner as gladly young beginners and tender wits might take and conceive. Wherefore I pray you, all little babes, all little children, learn gladly this little treatise, and commend it diligently unto your memories. Trusting of this beginning that ye shall proceed and grow to perfect literature, and come at the last to be great clerks. And lift up your little white hands for me, which prayeth for you to God. To whom be all honour and imperial majesty and glory. Amen. Prologi finis.

As Colet is a prominent figure in the education of his period, though he wrote so little on education, I give the following references:

1. *A life of John Colet, D. D., Dean of S. Paul's and Founder of S. Paul's School. With an Appendix of some of his English Writings, By J. H. Lupton, M. A., Surmaster of S. Paul's School.* London. George Bell and Sons, 1887.

In an Appendix to this book are *The Statutes of S. Paul's School*, as drawn up in John Colet's words; and Colet's *Catechism* and *Articles of Admission* to S. Paul's School.

2. *The Life of Dr. J. Colet*, by S. Knight. 1724.
3. *The Oxford Reformers; John Colet, Erasmus, and Thomas More.* By F. Seebohm. 3rd ed. 1887.
4. *Erasmus's Lives of Vitrier and Colet.* Written in Latin. Translated, with notes, by J. H. Lupton. George Bell and Sons. 1883.

1529. Erasmus (Desiderius). 1466–1536.

(Born at Rotterdam, 1466. Educated at Deventer (under Hegius, who had learned Greek from Rodolph Agricola). Entered upon the novitiate at Stein, near Gonda, and afterwards ordained priest. Became secretary to the Bishop of Cambrai. He soon left to become a student in the University of Paris. He came to England in 1497, and for the next three years lived in Oxford. He then is found moving continually between France and Holland, and with constant difficulty warding off poverty. In 1506 he is again in England, in London and at Cambridge. Later in the year he visits Italy, where he stays till 1509. He then returns to England as the guest of Sir Thomas More, and later removes to Cambridge, where he becomes Lady Margaret's professor of divinity and afterwards Regius Reader of Greek. In 1513 he left England and went to Strasburg and to Basel. In 1520 Erasmus settled at Basel as general editor and literary adviser to Froben's press. He helped to make this press the most important in Europe for a time. In 1527 Froben died, and in 1529 Erasmus moved to Freiburg. He returned to Basel in 1535 and died 1536.)

For the life of Erasmus in detail, the following books may be consulted:

- Jortin. *Life of Erasmus.* London. 1748. 4to.
 Knight, Samuel. *Life of Erasmus.* Cambridge. 1726. 8vo.

Burigny, Jean Lévesque de. *Vie d'Érasme.* Paris. 2 vols. 1757. 12mo. Dans laquelle on trouvera l'histoire de plusieurs hommes célèbres avec lesquels il a été en liaison, l'analyse critique de ses ouvrages, et l'examen impartial de ses sentimens en matière de religion.

- Seebohm, F. *Oxford Reformers.* London. 1887.
 Drummond, R. B. *Erasmus: his Life and Character.* London. 1873. 2 vols. 8vo.

There are two collected editions of his works, viz.

1540. Basel. In 9 volumes, fol.
 1703–6. Lugd. Bat. In 10 volumes fol. (Ed. Le Clerc.)

In the British Museum Catalogue the epitomised Index has reference to 266 different works of Erasmus, and the Catalogue entries of editions of separate works run to 58 printed columns.

Besides the books described hereafter, the following books or booklets of Erasmus are in the British Museum Catalogue and have some bearing, more or less, on education (they were not translated into English): *Adhortatio ad Christianæ philosophiæ studium* (or *Paraclesis*), *Catechismus*, *Christiani principis institutio*,

Ciceronianus dialogus, Life of Colet, Concio de puero Jesu, Libellus de constructione, Copia verborum, De conscribendis epistolis, De duplici copia verborum et rerum, De ratione studii, De civilitate morum puerilium, De pueris ad virtutem instituendis, De recta Latini sermonis pronuntiatione, Epicureus, Ratio colligendi exempla, Institutum Christiani hominis, Lingua, Militis Christiani enchiridion, Octo orationis partium constructio, Parabola sive similitum liber, Syntaxis, Annotationes in Testamentum Novum, Life of Vitrier.

The letters of Erasmus, of course, are of very high importance in the educational as well as the general literary history of the time. As an illustration of the side light they afford on the history of education at that period, I would quote the words with which the Cambridge M. A. answered Erasmus when the latter was endeavoring to get an assistant master for Colet's school, "Who would endure to be a schoolmaster who could possibly manage to get a living any other way?"

Whereupon Erasmus modestly urged that he thought the education of youth was the most honourable of all callings, and that there could be no labour more pleasing to God than the Christian training of boys. At which the Cambridge doctor turned up his nose in contempt and scornfully replied, "If anyone wants to give himself up entirely to the service of Christ let him enter a monastery." Erasmus ventured to question whether St. Paul did not place true religion rather in works of charity—in doing as much good as possible to our neighbours? The other rejected altogether so crude a notion. "Behold," said he, "we must leave all; in that is perfection." "He scarcely can be said to leave all," promptly returned Erasmus, "who, when he has a chance of doing good to others, refuses the task, because it is too humble in the eyes of the world." "And then," wrote Erasmus, "lest I should get into a quarrel I bade the man good-bye."—Seebohm: Oxford Reformers, p. 221.

Here is an example in much more detail. Erasmus, in one of his letters to Dean Colet (in whose new school of S. Paul's he was deeply interested), described his idea of the schoolmaster's academic equipment:

In order that the teacher might be thoroughly up to his work, he should not merely be a master of one particular branch of study. He should himself have travelled through the whole circle of knowledge. In philosophy he should have studied Plato and Aristotle, Theophrastus and Plotinus; in theology the Sacred Scriptures, and after them Origen, Chrysostom, and Basil among the Greek fathers, and Ambrose and Jerome among the Latin fathers; among the poets Homer and Ovid; in geography, which is very important in the study of history, Pomponius Mela, Ptolemy, Pliny, Strabo. He should know what ancient names of rivers, mountains, countries, cities, answer to the modern ones; and the same of trees, animals, instruments, clothes, and gems, with regard to which it is incredible how ignorant even educated men are. He should take note of little facts about agriculture, architecture, military and culinary arts, mentioned by different authors. He should be able to trace the origin of words, their gradual corruption in the languages of Constantinople, Italy, Spain and France. Nothing should be beneath his observation which can illustrate history or the meaning of the poets. But you will say what a load you are putting on the back of the poor teacher! It is so; but I burden the one to relieve the many. I want the teacher to have traversed the whole range of knowledge, that it may spare each of his scholars doing it. A diligent and thoroughly competent master might give boys a fair proficiency in both Latin and Greek in a shorter time and with less labour than the common run of pedagogues take to teach their babble.—Seebohm: Oxford Reformers, p. 217-8.

Erasmus (Desiderius).

An exhortation to the diligent studye of scripture made by Erasmus. And translated into inglissh (by W. Roy). B. L. Hans Luft; Malborow in the lande of Hesse, 1529. Svo. Another edition: R. Wyer. (London, 1540?)

This exhortation was prefixed to Erasmus's Paraphrase of S. Matthew's Gospel. It is a plea for the study of the Scriptures by all, learned and unlearned. To the learned he says:

Plato's adherents, Pythagoras' scholars, the Academics, the Stoics, Epicureus, the fautores [flatterers] of Aristotle and disciples of Diogenes know groundly [thoroughly], yea and by heart, the traditions of their own sect. And fight most fiercely for them, ready rather to die than to forsake their patron and author. And why

do we not much more give our minds and studies, unto our maister and prince Christ, who wolde not count it a foul thing yea a great rebuke to him that professeth Aristotle's philosophy if he be ignorant what his maister judgeth concerning the causes of the thunder, of the rainbow, of the earthquakes, and of such other natural causes. * * * Howbeit for what intent use we this comparison, since it is extreme madness to compare Christ with Zeno and Aristotle and his heavenly doctrine with their trifling traditions.

To those who are not learned he says:

I would to God the ploughman would sing a text of the Scripture at his plough-beam. And that the weaver at his loom with this would drive away the tediousness of time. I would the wayfaring man with this pastime would expell the weariness of his journey. And to be short, I would that all the communication of the Christian should be of the Scripture, for in a manner such are we ourselves as our daily tales are.

The warm, enthusiastic catholic spirit of such words as these are in marked contrast to that of the man who would not lend Erasmus his copy of Suidas.¹ It is the readiness to communicate the best that is in him to all, even the ploughman, the weaver, the wayfaring man, that marks the in-coming of the modern spirit of education. Erasmus felt it, and such words as the above are a statement of it. He pleads for education not only to be given to the humblest, but to begin with infancy.² He offers thus an interesting parallel to Comenius, in both ideas.

The Colloquia of Erasmus. 1519, editio princeps.

By far his most popular, his best known, and after the *Moria* his most characteristic work, a book once literally known to every school-boy, inasmuch as it was universally used as a Latin lesson-book, and which will always continue to be read by all lovers of excellent humour, as well as by every one who would understand the spirit and recall the manners of the early part of the sixteenth century.—R. B. Drummond, Erasmus: His Life and Character, Vol. ii, p. 151-2.

Method of composition.—Some were youthful exercises for the improvement of style; others were dictated as I walked up and down, thinking of nothing less than of publication. Some were written for the benefit of backward pupils. Of this kind were the Colloquies, which one Helenius obtained—I know not how, for I never had a copy by me—and sold at a high price to John Froben, pretending there were other printers who wanted to buy them.—Letters of Erasmus, 1536.

The Colloquies was first printed in 1519, and was a mere pamphlet. By successive additions, in 1530 it became of a considerable size. It was written at first for the benefit of Froben's son, Erasmus.

As it now lies before us, it consists of a large number of conversations on a great variety of subjects, whose easy flow and natural, graceful manner are not the least of their charms, full of delicate humour, keen irony, biting satire, elegant criticism, and lively description, wherein now a text of Scripture, now a passage from the classics, is made the subject of discussion, now some folly turned into ridicule, now some superstition exposed, while occasional autobiographical touches or allusions to contemporaneous persons or events lend a great additional interest.—Drummond: Vol. I, p. 153-4.

It is by reference to such a book as this that one sees the religico-classical influence of the Renaissance unconsciously displayed. For instance, Erasmus says he had never read Cicero on Old Age, or Friendship, or the Offices, or the Tusculan Questions, "without pausing now and then to kiss the page and pay homage to that holy soul whom God's spirit has so manifestly possessed." And again, after quoting a passage from Socrates, one of the speakers in a dialogue says: "When I read such passages as these, I can scarcely keep myself from saying, *Sancte Socrates, ora pro nobis.*" (Quoted by Drummond.)

English Editions of the Colloquia:

1. Colloquiorum * * * Familiarum opus aureum. (Edited by J. Clarke.) London, 1676. 8vo. Also 12mo, 1697.

¹ See p. 870.

² See pp. 873-4.

English Editions of the Colloquia—Continued.

2. Colloquiorum * * * familiarum opus aureum. (Edited by S. Patrick.) London, 1773. 8vo.
3. The Colloquies; or, familiar discourses of D. Erasmus * * * rendered into English * * * By H. M., Gent. London, 1671. 8vo.
4. All the familiar colloquies of D. Erasmo * * * translated into English. By N. Bailey. London, 1725. 8vo. Also 1733.

Reprints of Bailey's translation:

1. Glasgow, 1877. 8vo.
2. Ed. by E. Johnson, 2 vols. London and Boston, England, 1878. 8vo. This is decidedly the best edition in English.

Selections:

1. Studium Pietasque Puerilis ex D. Erasmus. 1530. 8vo.
2. D. Erasmi Colloquia familiaria selecta * * * In usum scholarum, pp. 142. Perthensi, 1791. 12mo.
3. Desiderii Erasmi Colloquia duo. (Edited by C. H. O. Daniel.) Oxonii. (1880.) 16mo.
4. Epitome Colloquiorum Erasmi. London, 1557. 8vo.
5. Epitome Colloquiorum Erasmi continens in se communiores quotidiani sermonis formulas, nunc denuo in puerorum usum editas. Excudebat J. Harrison, impensis Roberti Dexter. Londini, 1602. 8vo. Also editio novissima, R. Daniel, Cantabrigiae, 1634.
6. Erasmi Colloquia selecta, or the select colloquies of Erasmus with an English translation, by J. Clarke. Lat. & Eng. Nottingham, 1720. 12mo. Also 1725? 1727, 1736, 1742, 1752, 1785 (R. Raikes, Gloucester), Philadelphia, 1804.
7. Erasmi Colloquia selecta: arranged for translation and retranslation; adapted for the use of boys, who have begun the Latin Syntax. By E. C. Lowe. pp. XII, 192. Oxford and London, 1866. 8vo.
8. Two dialoges wrytten in laten by the famous clerke D. Erasmus of Roterdame, one called Polyphemus * * * the other dysposying of thynges and names, translated in to Englyshe by E. Becke. B. L. Canterbury (1550). 8vo.
9. Seven dialogues both pithie and profitable * * * Compiled first in Latine by * * * Erasmus, and now * * * translated into English by W. B[urton]. B. L. London, 1606. 4to.
10. Pleasant dialogues and dramma's, selected out of * * * Erasmus, &c. 1637. 12mo.
11. Twenty select Colloquies out of Erasmus * * * pleasantly representing several superstitious levities that were crept into the Church of Rome in his days. Made english by R. L'Estrange. London, 1680. 12mo.
12. Twenty-two select Colloquies out of Erasmus, 2nd edit., corrected and amended, of above. 1689. Also 1699, 1711, 1725.
13. Seven new Colloquies translated out of Erasmus. By Mr. Brown. London, 1693. 12mo.
14. Selections from the Colloquies. Edited by V. S. Clark, with notes and vocabularies. Ginn & Co., Boston, U.S.A. pp. xiii, 197. 8vo.

It is interesting to add that the German educationist, J. B. Basedow, edited an edition, entitled:

Encyclopædia philanthropica Colloquiorum Erasmi. Dentis illis partibus quæ erant adolescentium nocivæ. 8vo. pp. x, 324. Lipsie, 1775.

SUBJECTS OF THE COLLOQUIES.

Colloquies of Erasmus. London, 1878. Vol. I. (Bailey's translation.)

Subjects: Courtesy in Saluting, Family Discourse, Of Rash Vows, Of Benefice-Hunters, Of a Soldier's Life, The Commands of a Master, The Schoolmaster's Admonitions, Of Various Plays, The Child's Piety, The Art of Hunting, Scholastic Studies, The Profane Feast, The Religious Treat, The Apotheosis of Capnio, A Lover and Maiden, The Virgin averse to Matrimony, The Penitent Virgin, The Uneasy Wife, The Soldier and Carthusian, Philetymus and Pseudocheus, The Shipwreck, Diversoria, The Young Man & Harlot, The Poetical Feast, An Enquiry concerning Faith, The Old Men's Dialogue, The Franciscans, *Πτωχολούσοι*, or Rich Beggars, The Abbot & Learned Woman, The Epithalamium of Petrus Ægidius, The Exorcism or Apparition, The Alchymist, The Horse-Cheat, The Beggars' Dialogue, The Fabulous Feast, The Lying in Woman.

In the dialogue on The Schoolmaster's Admonitions, the boy is instructed as to the modesty, civility, and manners becoming his age, in what posture he ought to stand while he talks to his superiors; and what concerns habit, discourse, and behaviour at table and in school. In the dialogue Of Various Plays, the boys send Cocolus, their messenger, to the master to get leave to go to play. Heshews that moderate recreations are necessary for mind and body. The master admonishes boys to keep together at play. Then are discussed stool-ball, bowls, ball and ring, dancing, leap-frog, running, swimming. A further dialogue takes up Hunting. The Child's Piety gives views on religious education, here inspired by the Scholastic Studies, treats of the whipping master, saying a lesson, fear hurts the memory, of writing, and of making a (quill) pen. In The Abbot & the Learned Woman, the latter is praised for reading Latin and Greek rather than confining herself to French.

Colloquies of Erasmus. London, 1878. Vol. II. (Bailey's translation.)

Subjects: The Religious Pilgrimage, *Ἰχθυοφαγία*, The Funeral, The Echo, The Unequal Feast, Of Things and Words, Charon, The Assembly of Grammarians, The Unequald Marriage, The Imposture, Cyclops or the Gospel Carrier, The Impertinents or Cross-Purposes, The False-Knight, The Play of Cockall, The Assembly or Parliament of Women, Diluculum or the Early Rising, The Sober Feast, The Notable Art, The Sermon or Merdardus, The Lover of Glory, Opulentia Sordida or the Wealthy Miser, The Seraphick Funeral, Amicitia or Friendship, Problema, the Problems, The Epicurean, The Conflict between Thalia and Barbarism, Concerning the Profitableness of Colloquies, Of the Method of Study.

In Of Things & Words Erasmus, a hundred years before Comenius, exposes "the preposterous judgments of some people who are more ambitious of names than they are of the things themselves, to be esteemed than to deserve esteem," but he deals rather with the abstract than the concrete, e. g., name of a liar and thief. The Assembly of Grammarians ridicules the pretensions of hair-splitters about words. The Notable Art derides the vain boastingness of a bold pretence of a certain book promising the knowledge of languages and science in fourteen days' time. In The Conflict between Thalia and Barbarism Erasmus inveighs against the barbarous Latin in those days, commonly allowed and approved, particularly in a great school or college at Zwoil, a town twelve miles from Daventer, where, instead of pure Latin authors, the scholars were put to learn books stuffed with inelegancies and barbarisms. The Method of Study gives such advice as the following:

By no means have your study furnished with learned books, and be unlearned yourself * * *. If you are in doubt of anything, don't be ashamed to ask: or if you have committed an error, to be corrected. Avoid late and unseasonable studies, for they murder wit, and are very prejudicial to health. The Muses love the morning and that is a fit time for study. After you have dined, either divert yourself at some exercise or take a walk and discourse merrily, and study between whiles * * *. Always keep this sentence of Pliny's in your mind, "All that time is lost that you don't bestow on study."

Erasmus (Desiderius).

De Civitate Morum puerilium per Des. Erasmum. Roterodamum libellus nunc primum et conditus et editus. Roberto Whittintoni interprete. A lytel booke of good maners for chyl dren newe lately compyled and put forth by Erasmus Roterodam in Latin tongue, with interpretation by Robert Whityngton laureate poet. Wynkyn de Worde, 1532.

One of the many books of manners of the period, as to which consult Dr. F. J.

Furnivall's book (Forewords and Text) on *Manners and Meals in Olden Time*—one of the publications for the Early English Text Society. Trübner, 1867.

Erasmus (Desiderius).

Proverbs or adagies with neue addicions gathered out of the Chiliades of Erasmus by R. Taverner. Hereunto be also added Mimi Publiani. B. L. Imprinted in Flet-strete at the sygne of the whyte Harte, London, 1539. 8vo. Also 1552.

Later editions in English:

Adagia, in Latine and English, contayning fyve hundreth proverbs. (Selected from the Chiliades of Erasmus.) E. Raban, Aberdeen, 1622. 8vo.

Proverbs, chiefly taken from the Adagia of Erasmus with explanations; and further illustrated by corresponding examples from the Spanish, Italian, French and English Languages. By R. Bland. 2 vols. London, 1814. 8vo.

These are small selections from the large folio Adagia of Erasmus published by Aldus at Venice in 1508. The Aldine edition is not the first, for the Adagia had been published at Paris in 1500, but in a much shorter form. In the earliest form it consisted of some 800 proverbs, but in the later of 4151. Mr. R. B. Drummond (Vol. I, Cap. X) gives a long and very interesting account of the book and its compilation. In it he says:

What a boon it must have been to the student in an age when books were rare and expensive, supplying him as it did, with apt and elegant phraseology on all sorts of subjects, serving as an introduction to the Greek and Latin classics, and furnishing besides eloquent declamations against kings and monks, war and priestcraft! To those, too, who desired an easy method of learning Greek, it must have been a valuable aid, all the Greek quotations, of which there were several thousands, being carefully rendered into Latin. Thus, besides to a great extent serving the purpose of a dictionary and a grammar, it is a common-place book, a journal and a book of travels, all in one.

In the beginning of the second "Chilias" of Proverbs, under the heading *Festina lente*, Erasmus himself describes his relations with the Aldi. He had the free run of the library of the Aldi at Venice. He was helped by Lascar, Marcus Musurus the poet, and Aleander. He complains of a Northern friend of his, contrasting his conduct with that of the Italians (Drummond, Vol. I, p. 279). "He had applied for the loan of a Suidas which he knew his friend to possess, and which had the Proverbs noted on the margin. He wished to have it merely for a few hours, until his amanuensis should copy some sentences into his notebook. The owner of the Suidas refused, in spite of repeated applications. Erasmus, having tried in vain to overcome his obstinacy, suggested that, perhaps he intended publishing a collection of proverbs himself. No: he vowed he had no such notion in his head. At last the admission was forced from him that he was afraid that learned men would be held in less esteem if what had hitherto been their monopoly should be made public property."

Erasmus (Desiderius).

Apophthegmes, that is to saie, prompte, quicke, wittie and sentencious sayynges, of certain Emperours, Kynges, Capitaines, Philosophiers and Oratours, as well Grekes, as Romaines. First gathered and compiled in Latine by the ryght famous clerke Maister Erasmus of Roterodame. And now translated into Englyske by N. Udall. B. L. Richard Grafton. London, 1542. 8vo. Also 1564.

Of this book there is a handsome reprint published at Boston, England, by Robert Roberts and edited by himself, 1877, with notes by the Rev. E. Johnson. The second edition (1564) is followed. The variations in spelling from the edition of 1542 are considerable.

A very short form of Erasmus's book translated into English is as follows:

Flores aliquot Sententiarum ex variis collecti scriptoribus. The Flowers of Sencies gathered out of sundry wryters by Erasmus in Latine and Englished by R. Taverner. Lat. and Eng. W. Middilton. London, 1547. 8vo. Also 1550.

Taverner clearly intends his book to be used by boys. In his preface he writes: "En edo hic vobis, florentissima pubes Britannica, flores sententiarum nonnullos * * *."

Vives (J. L.).

An introduction to wysedome, etc. (With "sentences of wise men, gathered together by Erasmus, and translated into English.") (1540 ?) 8vo.

Ten pages of Vives's book are occupied in accordance with the following announcement:

For the filling of void pages here following, we have inserted certain flowers of most notable sentences of wise men, gathered together by Erasmus of Rotterdam, and translated into English.

I have noted that Taverner intends his very small book for boys—and those probably in a low form. Erasmus early in his preface points out that only one man in many thousands has time to read regularly his Plato and Aristotle and the other ancient writers, and therefore he has chosen some of the more notable sayings of great men. Later on, however, he adds (Udall's transl.):

I am of this opinion, that young children might much more to their profit and benefit be exercised in the Grammar Schools with themes, or arguments to write on, of this sort, than with matters to make upon, such as are commonly used (which themes for the most part, as they contain nothing but little trifling senses, devoid of all pith or point, so do they nothing open the mysteries of the Latin tongue) so that the schoolmaister do open and declare the rules and ways, how that which is briefly spoken, may be dilated and set out more at large, and how that that is so fondly spoken, that the hearers or readers cannot but laugh at it, may be turned or applied, to a serious use and purpose.

The writers from whom Erasmus mainly quotes are: Socrates, Aristippus, Diogenes the Cynic. "Next after these three philosophers, but the same in this kind, most excelleng, we shall add like number of Kings and no mo, which for their saynges with civility and good fashion replenished have a name of honour above all other Kings—Philip, Alexander, and Antigonus the first, King of the Macedonians." "To the intent that we may after a sort make some likely match of Romans with the Greeks, we shall to Alexander set Julius Cæsar, to Philip we shall set Augustus, and to Antigonus we shall turn Pompeius of Rome." Then follow the sayings of two or three of the "very best" of the orators: Phocian, Cicero, Demosthenes.

The number of sayings given is as follows: Socrates, 102; Aristippus, 62; Diogenes, 231; Philip, 35; Alexander, 65; Antigonus, 30; Augustus Cæsar, 66; Julius Cæsar, 36; Pompey the Great, 21; Phocian, 23; Cicero, 70; Demosthenes, 23.

At the end of Udall's translation is the curious notice:

That thou mayest the soner and easlyer fynde (moste gentle reader) either the name of any persone or any other good mattier contained in this booke, I have here added a large and plaine Table after the ordre of the A B C set out with the noubre of the leafe, where thou shalt fynde any suche thyng as thou desyrest to have therin.

Each saying is followed by an exposition of Erasmus. The following, from Udall's translation of Erasmus's Apophthegmes, will serve as an example:

Aristippus firste of all the scholars of Socrates, sette up teaching of philosophie for money.

The familiar ghost or aungell of *Socrates*, called in Greke *δαίμων*, in Latin, *Genius*.

82. When Aristippus, the disciple of Socrates had of his gaines, of setting up the teaching Philosophie for money (which thing he first of all the scholars of Socrates, did set up and begin to doe) had sent 20 poundes unto his maister: Socrates sente the money backe again unto hym forthwith, alleging that his familiar good Aungell, would in no wise suffer him to take it.

Socrates allowed not that any man should take money for teaching vertue, and esteemed money so gotten, to be sacrilege.

For *Socrates* saied, that he had a familiar ghost or Aungell peculiar and proper to himself, of whom he was by a privie token forbidden, if he attempted, or went about to dooe any unhonest thyng. Verely, that familiar good Aungell, I suppose, was reason. And in the meanetyme, unto *Aristippus*, he did after a gentle sort, signifie hymself not to alowe, ne to thinke well doen, that he kept a schoole of morall Philosophie for money, and therefore the same gifte of his as a thyng gotten by plaine sacrilege, he utterly refused, and would none of it.

In connexion with the Book of *Apophthegmes* of *Erasmus* it is convenient here to say something of the translator:

Nicholas Udall. (1505, died c. 1556.) Born in Hampshire 1505. Scholar of Corpus Christi College, Oxford, 1520. Master of Eton, 1534. His severity has been noted by *Tusser* in *Five Hundred Points of Good Husbandry*:

From Paul's I went, To Eton sent,
To learn straightways The Latin phrase,
Where fifty-three stripes given to me,
At once I had:
For fault but small, or none at all;
It came to pass that beat I was,
See, *Udall*, see the mercy of thee
To me, poor lad.

(He appears to have been headmaster of Westminster School, for the two years preceding his death.) He held the livings of Briantree in Essex and (in 1553) Calborne in the Isle of Wight. At one time he was Canon of Windsor. Besides the *Apophthegmes* of *Erasmus*, he translated the following books:

1. *Flowers for Latin speaking*, selected and gathered out of *Terence*, and the same translated into English. 1533, 1538, 1560, 1568, 1575.
2. *Erasmus's Paraphrase on the Gospels and Acts of the Apostles*.

The *Encomium Moriae*, or *Praise of Folly*, was printed at Strasburg in 1511. In English, the first edition is:

The praise of Folie. Moriae Encomium, a booke made in Latine by that great clerke Erasmus Roterodame. Englished by Sir Thomas Chaloner, Knight. B. L. Anno 1559. (T. Berthelet.)

Recent edition: Translated by *James Copner*, M. A., Vicar of Elstow. London. Williams and Norgate. 1878.

Mr. Drummond says of it (Vol. I, p. 185): "It really contains, in a short compass, his whole philosophy of man—all that he ever wrote on the abuses of his time, on the superstition of monks, and the pride of kings. Abounding in wit and eloquence, and displaying great knowledge of the world and keen observation of men and things, it has also its deep and serious meanings underneath the light satire that plays upon the surface." The book is of great importance, therefore, as giving an insight into the condition of the age, but has only, for the most part, an indirect bearing on education. The following passage, however, is of direct interest:

[Amongst those in eager pursuit of "wisdom's golden branch"] a foremost place is occupied by the schoolmasters, a class of men who would indeed be in the most calamitous, the most afflicted, the most God-forsaken condition conceivable were it not that I (*Folly*) of my benevolence ameliorate the wretchedness of their most wretched profession by making bitter lives perceptibly sweet to them, rendering them, to a very considerable extent, insanely happy in the midst of their most insane and most laborious drudgery. Verily their lot is a woeful one indeed, cursed—not, as the Greek epigram has it, with five—but with five hundred

drawbacks. It is a lot of semi-starvation and of debasing slavery. In their schools—well; schools I call them, though “schools” is indeed far too good a name for those hotbeds of care and misery, those grinding mills, those dens of torture, in which, superintending flocks of small boys, these unfortunate pedagogues are destined to eke out the measure of their days. In these schools, then, these bride-wells of uproar and confusion, do they grow prematurely old, exhausted by their labours, deafened by continual hubbub, and with their constitutions shattered and broken down, owing to the close foulness of the atmosphere that day by day they are necessitated to breathe. Yet, notwithstanding all this, thanks to my good services, they are by no means such miserable creatures as you might at first sight be inclined to imagine. In their own estimation they are important personages enough, and think themselves mightily fine fellows; but whilst they strut about with stern looks and scolding voices, striking terror and alarm into the breasts of a set of trembling urchins, half scarifying the little wretches occasionally with canes, and birches and straps, and exercising their arbitrary tyranny over them in all sorts of other ways, they after all, do but ludicrously perform the part of the ass in the well-known fable. [They take no steps to remove the dust and dirt from their schoolroom.] In fact evidently to them filth is as cleanliness, and bad smells as perfumes. [They have a wonderfully good opinion of themselves and are able to impress parents with a belief in their ability. The more out-of-the-way their knowledge is, the better pleased they are.] Dear me! if any one of them happens to discover who was Anchises’s grandmother; or if, in some worm-eaten chart, he chances to light upon a word or two of barbarous, unused Latin, such as *bubsequa*, for instance, or *bovinator* or *manticulator*; or if—never mind where—he is lucky enough to dig up the fragment of an old stone containing a few mutilated characters of an ancient inscription upon it, verily, by Jove! he is thrown into such a transport of triumphant exultation that you might imagine he had conquered Africa, or captured the city of Babylon! [They also think they are gifted with a marvellous genius for poetry. They flood upon one another mutual congratulations, laudations, and flatteries, if they happen all of them to agree in opinion. They wrangle over pronunciation and grammatical distinctions.] In consequence of all this discord among grammarians we have naturally an endless number of conflicting grammars—as many grammars as there are men to write them—nay, more; for I know one grammarian—a friend of mine of the name of Aldus—who alone has produced five different grammars! No new grammar that comes out, however barbarously and unintelligibly written, does he allow to escape his notice. He pores over it with avidity, and criticises with a jealous eye every sentence it contains; for he can brook no one who attempts any thing, however indifferent in this department of literature, being always in a wretched, morbid state of nervous trepidation lest, amongst the numerous makers of grammars who are perpetually springing up, some fresh aspirant should arise who, by forestalling him in the promulgation of new grammatical ideas, should deprive him of his reputation as a grammarian, and of the fruits of his years and years of labour.—Copner’s translation, Chapter vii.

In this connexion, the fact may be recalled that Melancthon wrote a tractate, *De Miseriis Paedagogorum*.

A treatise of Schemes and Tropes very profytable for the better understanding of good authors, gathered out of the best Grammarians and Oratours by Rychard Sherry, Londoner. *Whereunto is added a declamacion, That chyldren ewen stragt fro their infancie should be well and gently broughte vp in learnynge. Written fyrst in Latin by the most excellent and famous Clerke, Erasmus of Roterodame.* (1550. J. Day.)

The second portion is an important contribution of Erasmus to the educational literature of the age. The following is his own summary of its argument:

Consider how dear a possession your son is, how diverse a thing it is and a matter of much work to come by learning, and how noble also the same is, what a readiness is in all children’s wits to learn, what agility is in the mind of man, how easily those things be learned which be best and agreeable to nature, inespacially if they be taught of learned and gentle maisters by the way of play: further how fast those things abide with us, wherewith we season first of all the empty and rude minds which self things an elder eye perceiveth both more hardly and sooner forgetteth; Beside this how dear and the loss never recovered, time is, how much it availeth to begin in season, and to learn everything when it should be, how much continuance is able to do, and how greatly the heap that Hesiodus speaketh

of doth increase by putting to little and little, how swiftly the time flieth away, how youth will always be occupied, how unapt old age is to be taught: If thou consider these things thou wilt never suffer that thy little child should pass away (I will not say) seven year, but not so much as three days, in the which he may be either prepared or instructed to learning, though the profit be never so little.

The following are dissertations on the educational aspects of Erasmus:

Das Ideal der Bildung und Erziehung bei Erasmus von Rotterdam. By Dr. G. Glöckner. Dresden: Bteyl & Kaemmerer, 1889.

Die pädagogischen Anschauungen des Erasmus in ihrer psychologischen Begründung. By Hermann Tögel. Dresden: Bteyl & Kaemmerer, 1896.

1531. Sir Thomas Elyot. (? 1490—1546.)

(The facts of the life of Elyot have been investigated with thorough-going care by Mr. H. H. S. Croft in his very valuable reprint of *The Boke Named the Governour*, from the first edition of 1531. The following points may be useful for reference. Elyot was, probably, a native of Wiltshire, and was born about 1490. He had a home education in Greek and Latin, but it is not certain if he was at either of the Universities. In 1511 Elyot, as clerk of assize, accompanies his father, who was the judge on the western circuit. In 1522-3 Elyot came, by his father's death, into the possession of the Combe estate near Woodstock. Elyot attracted the notice of Wolsey, then of Thomas Cromwell, and was appointed to various offices. In 1530, however, he was discharged from the clerkship of council. From this time forward he became converted to literature. He was induced to become ambassador to Germany, but bitterly complains that for his diplomatic and other official duties he has received no payment. He was married, about 1522, to Margaret Abarrow of North Charford, Hampshire. They had no children. He died in 1546, and was buried at Carleton.)

Elyot (Sir Thomas).

The boke named the Governour, devised by Thomas Elyot, Knight. B. L. MS. notes. In ædibus Tho. Bertheleti, Londini, 1531. Svo. Also 1546, 1553, 1557, 1564, 1565, 1580, and other editions.

Reprints:

- I. Based on the text of 1564—edited by Mr. A. T. Eliot, Scholar of Catherine Hall, Cambridge, published at Newcastle, 1834. Not satisfactory, on account of the attempt to "simplify" the composition of Sir Thomas Elyot, and also on account of the omissions.
- II. The scholarly reprint of 1880 (London: Kegan Paul), edited by Mr. H. H. S. Croft. This has a complete apparatus of Preface, Life, Notes, Index, Glossary, with Appendices of Obsolete Words formed from the Latin, Obsolete Words formed from the French.

In the shorter histories of education, e. g., Compayré's, and Joseph Payne's Lectures, there is no account of Elyot. Mr. Quick mentions Mr. Croft's Reprint, and quotes the following sentence from Elyot: "Good Lord! how many good and dear wits of children be now-a-days perished by ignorant schoolmasters."

James Parmentier, in his *Histoire de l'éducation en Angleterre*, devotes Chapter II to Elyot.

There is a dissertation entitled, *Ist Thomas Elyot ein Vorgänger John Locke's in der Erziehungslehre?* Leipzig: Oswald Schmidt, 1896.

The Boke Named the Governour is modeled on the *De regno et regis institutione* of Francesco Patrizi (Paris, 1518). Elyot is also clearly indebted to the *Institutio principis Christiani* of Desiderius Erasmus (Basilea, 1516), and to the *De principe* of Joannes Juvianus Pontanus, 1513.

On the other hand the Boke Named the Governour probably gave rise to, or at least influenced:

Sturm, J.—*De institutione Principis.* Walsingham's Manual for Statesmen.
Raleigh, Sir W.—*The Prince—Maxims of State* drawn up for Prince Henry,

Mr. Croft names also: 1555, *The Institution of a Gentleman*, and, 1606, Ludovick Bryskett's *Discourse of Civil Life*.

Sir Thomas Elyot divides the Booke of the Governour into two books, the first of which gives his ideas on education. He thus explains his general aim:

I have expressed my concepte and opinion touching nat only the studies, but also the exercises concernynge the necessary education of noble men and other, called to the governance of a publike weale, in such fourme as, by the noble example of their liues and the frute thereof coming, the publike weale that shal happen to be under their governance, shall nat faile to be accounted happy and the autoritie on them to be employed well and fortunately.

The following subjects are treated by Sir Thomas Elyot in his Chapters on Education:

The form of education of a gentleman's son with a view to service to the Commonwealth. Education up to seven years of age, with order of subjects. Appointment of tutor. Music. Painting and carving. Choice of masters. Order of learning and the sequence of authors. The poets. The most necessary subjects after the poets. Comparison of ancient and modern learning. The teaching of law. The causes why in England there be few perfect school-masters. Gentlemen's exercises, for recreation and profit. Hunting. Dancing. Providence, industry, circumspection, election, experience, modesty. Other exercises. That shooting in a long-bow is principal of all other exercises.

Sir Thomas Elyot is the first English writer on education who has felt the full force of the Renaissance. His views are vividly coloured, not to say formed, by the humanistic revival. He is proud of his knowledge of Greek. He was a friend of Sir Thomas More and familiar with the writings of Erasmus. He insisted on the necessity of a liberal and disinterested education for specialists, and although this term usually in his age, and indeed up to the present time, has been taken to mean those having a knowledge of Latin and Greek literature and language, yet Elyot no less delighted in his facility in writing English.

Some of the contents of Sir Thomas Elyot's "*Governor*" deserve more detailed mention. In his own words can be given the reason why he deals with education of noblemen's sons rather than with that of the vulgar:

I will use the policy of a wise and cunning gardener: who purposing to have in his garden a fine and precious herb that should be to him and all other repairing thereto, excellently commodious or pleasant, he will first search throughout his garden where he can find the most mellow and fertile earth; and therein will he put the seed of the herb to grow and be nourished: and in most diligent wise attend that no weed be suffered to grow or approach nigh unto it: and to the intent it may thrive the faster, as soon as the form of a herb once appeareth, he will set a vessel of water by it, in such wise that it may continually distil on the root sweet drops; and as it springeth in stalk, underset it with something that it break not, and alway keep it clean from weeds. Semblable order will I ensue in the forming the gentle wits of noble men's children.

This garden-like nurture of children is described in detail, especial stress being laid upon the necessity of employing a nurse of "approved virtue, discretion and gravity", and exercising a stern censorship over playfellows permitted. Were it not that Elyot wrote *A Defence of Good Women* (London: 1545), it might be gathered that he had some mistrust of women's influence on children. He considers it highly desirable that a nobleman should instruct his own children, if he be able, for even a king, Dionysius the tyrant, taught grammar in a common school, in the days of his exile. Why should not, then, the children be exercised at home in speaking Latin? "As touching grammar", Elyot adds, "there is at this day better introductions, and more facile, than ever before were made, concerning as well Greek as Latin, if they be wisely chosen."

At seven years of age, the child should be taken from "the company of women," and put under a tutor who is to make it his business to know the character and power of his pupil. Music, in a temperate degree, is to be cultivated, because it is necessary to the knowledge of a public weal. The commonwealth, like music, is made up of an order of estates and degrees, and therefore contains within it a

"perfect harmony". Elyot's book is a direct reflection of the revival of Plato's Republic in his insistence on music and gymnastics.

Though a predecessor of Comenius by a century, Sir Thomas Elyot has a clear idea of the teaching of things as well as names. He would have the teacher inform the child of the names in Latin of "all things that cometh in sight, and to name all the parts of their bodies" (the subject of one of the chapters of Comenius's *Janua Linguarum reserata*). Further, in giving children what they covet or desire, Elyot would wish the teacher, "in most gentyl manner", to get the child to "ask it again in Latin!" Or, again, is there not a forecast of Comenius in such a conviction of the importance of realistic teaching as the following: In geometry, astronomy, and cosmography (called in English the description of the world)—in these studies, "I dare affirm a man shall more profit, in one week, by figures and charts, well and perfectly made, than he shall by the only reading or hearing the rules of that science by the space of half a year at the least; wherefore the late writers deserve no small commendation which added to the authors of [in] those sciences apt and proper figures."

A fortiori, goes on the argument, if the pupil learns to draw for himself there will be a great gain to education. Not that the author wishes to make a nobleman's son a common painter or carver, "which shall present himself openly stained or embrued with sundry colours or powdered with the dust of stones that he cutteth or perfumed with tedious savours of the metals by him yoten" (melted)—but he thinks drawing, carving, etc., excellences in themselves in their training of the eye (like music, of the ear), and also because of their "adminiculation" (service) to the other serious studies.

Throughout Elyot's treatise is discernible the desire that education should be liberal. He is particularly persistent in requiring the teacher to be "excellently learned both in Greek and Latin," and to be a clear and pure example of gentle thought and life. From seven years of age, for three years the child is to "learn Greek authors, and to use the Latin tongue as a familiar language". If Latin were only spoken it might be learned as is French. Elyot points out that French grammar in his time had come to have nearly as many rules and figures as Latin or Greek. Greek Grammars were innumerable (*even by 1531*), and Elyot would only add, "Detain not the child too long in the tedious Grammars. Let not the child's fervent desire of learning become extinct by the time he cometh to the most sweet and pleasant reading of old authors". When Elyot reaches the discussion of his beloved authors, his views are very different from those of Comenius.

These are the books for the child to read—a long list, over which Sir Thomas Elyot revels: *Æsop's Fables*, *Select Dialogues of Lucian*, *Comedies of Aristophanes*, *Homer*, *Virgil*, *Silius*, *Lucanus*, *Hesiodus*. These will suffice up to twelve years of age! It is explained, however, that from each should only be chosen so much instruction as is fitted to the child, and at least it is to be expected that the spirit of poetry shall enter his soul to inflame his courage and to condemn folly. To these poetic and human studies succeeds the more "serious" learning of logic, rhetoric, cosmography (in which Elyot has "incredible delight"). "I cannot tell," he says of pictures and maps, "what more pleasure should happen to a gentle wit than to behold in his own house everything that within all the world is contained." After cosmography, history should be taught. *Livy*, *Xenophon*, *Quintus Curtius*, *Julius Cæsar*, *Sallust*, and *Tacitus* are to be read. At seventeen, moral philosophy is to begin, with the reading of *Aristotle's Ethics* and of *Tully's Offices*. Above all, *Plato*. Elyot breaks forth:

Lord God, what incomparable sweetness of words and matter shall [the pupil] find in the said works of *Plato* and *Cicero*; wherein is joined gravity with delectation, excellent wisdom with divine eloquence, absolute virtue with pleasure incredible, and every place is so infarced [stuffed full] with profitable counsel,

joined with honesty, that those three books be almost sufficient to make a perfect and excellent governor. The proverbs of Solomon with the books of Ecclesiastes and Ecclesiasticus be very good lessons. All the historical parts of the Bible be right necessary for to be read of a noble man, after that he is mature in years. And the residue (with the new testament) is to be reverently touched, as a celestial jewel or relick, having the chief interpreter of those books, true and constant faith and dreadfully to set hands thereon.

I have quoted the above passage at length to show the complete sway which the Renaissance spirit had over Elyot. Aristotle, Cicero, and Plato are named before the books of the Bible in the subject of moral philosophy. To these is added Erasmus's Institution of a Christian Prince. In accordance with the Renaissance ideal, Elyot was *laudator temporis acti*. Learning had declined, he says, on account of the pride of parents, which rose above "clerkship;" the avarice of parents causes them chiefly to inquire with how small a salary a teacher will be contented, and never how much good learning he hath; the negligence of parents allows children, as long as they are educated up to a certain point, to remain comparatively idle and self-indulgent.

Having dealt with his Neo-Platonic music-teaching, Elyot enters upon gymnastic training. He treats the subject very learnedly on the historical side. The topics spoken of are: wrestling, running, swimming (interestingly illustrated, of course, by the examples of Horatius Cocles and Julius Cæsar), defence with battle-axe, riding and vaulting, hunting of all kinds, dancing, shooting with the long-bow. The most honourable of all exercises is riding a "great horse and a rough", the "principal" of all exercises is shooting.

A most interesting study would be a comparison between gymnastic training as treated by Elyot, and that of Richard Mulcaster in his "Positions" (1581). It would be found that Mulcaster excels on the expository side, and Elyot in his historical illustrations.

Elyot (Sir Thomas).

Of the knowledge, whiche maketh a wise man. B. L. *In ædibus T. Bertheleti. Londini, 1533.* Also 1534.

Five dialogues between Plato and Aristippus—written after reading the life of Plato "in the book of Laertius", and containing an account of the Platonic doctrine of wisdom.

In the Proheme, Sir Thomas Elyot states: "Wherefore after that I had applied the more part of my life in perusing diligently every auncient work that I might come by, either Greek or Latin, containing any part of philosophy necessary to the institution of man's life in virtue, I have endeavoured myself to set forth such part of my study as I thought might be profitable." He refers to King Henry VIII's kind reception of The Boke named the Governour, and says how he there intended "to augment our English tongue, whereby men should as well express more abundantly the thing that they conceived in their hearts * * * as also interpret out of Greek, Latin and other tongne into English." A justification is offered of his "Pasquill the Playne" (1533), which seems to have given offence. Finally, he undertakes during the residue of his life to now and then set forth such fruits of his studies as may be profitable to his country.

Elyot (Sir Thomas).

A sweete and devoute sermon of Holy saynt Ciprian of mortalitie of man. The rules of a Christian lyfe made by Picus erle of Mirandula, bothe translated into englyshe by syr Thomas Elyot knyghte. Londini in ædibus Tho. Bertheleti. 1534. 12mo.

The sermon is described by Elyot (Preface to Image of Governance, 1540) as "No little comfort in plagues and calamities."

The translation from Pico della Mirandola is interesting, not for the contents of the Rules, so much as showing Elyot's direct contact with the writings of the Italian revivers of learning.

Elyot (Sir Thomas).

The Doctrinal of Princes made by the noble oratour Isocrates, translated out of Greke in to Englishe by syr Thomas Eliot, knight. 1534. 12mo. (Thomas Berthelet.)

This oration of Isocrates to King Nicocles may be described as an essay in Greek translation—an attempt to see “if our English tongue might receive the quick and proper sentences pronounced by the Greeks”. At the end of the book there is a curious “Addicion to fill up vacant pages” on the subject of clemency as a quality in kings. As to the “Doctrinal,” Elyot says: “This little book is to be compared in counsel and short sentence with any book, holy scripture excepted.”

Elyot (Sir Thomas).

The Bankette of Sapience, compyled by syr Thomas Eliot, knyghte, & newly augmented with dyverse tytles and sentences. B. L. In cedibus T. Bertheleti. Londini. 1539. 8vo. Also 1542, 1545, 1557.

Suggested by the symposia of Plato, Xenophon, and Plutarch. The “Banquet” consists of sundry wise counsels gathered out of the works of most excellent persons, “as well faithful as gentiles”.

Elyot (Sir Thomas).

The Dictionary of Syr T. E., Knyght (Latin, English; with MS. letter of the author to Thomas Lord Cromwell in Brit. Mus. Copy.) Thomas Berthelet, Londini, 1538. fol. Also 1545, and, under the editorship of Thomas Cooper, 1550, 1552, 1559.

In 1565, 1573, 1578, 1584, there followed a further dictionary by Cooper on the basis of Elyot's Dictionary, called *Thesaurus lingue Romane et Britannice*. See further account, p. 880.

Elyot (Sir Thomas).

The Education or bringinge up of children translated oute of Plutarche by syr Thomas Eliot, Knyght. (Berthelet, 1535.)

Sir Thomas Elyot begs the reader not to exact of him the “exquisite diligence of an interpretour”, as he is simply employing his leisure in translating this book of Plutarch. He would not like his book to be compared with the “delectable styles of Grekes or Latines.” “It shall suffice me”, he says, “if by this littel labour I may cause you, my myn entierly beloued syster, to folowe the intent of Plutarche in byrnynginge and inducyng my litell newewes into the trayne and rule of vertue”. His sister is Margery Puttenham, to whom he dedicates the translation, and for whose benefit he enlarges the histories touched upon by Plutarch.

Elyot (Sir Thomas).

The Defence of Good Women, devised and made by Sir Thomas Elyot, Knyght. 1534, 1545. 16mo.

The argument: “A contention betwene two gentill men, the one named Caninius, the other Candidus. Caninius, like a curre, at womens condicions is alway barkyng: but Candidus, whiche maie be interpreted, benigne or gentill, judgeth ever well, and reproveth but seldom. Betwene them two, the estimation of womankind cometh in question. After long disputation, wherein Candidus (as reason is) hath the preheminance, at the last, for a perfect conclusion, Queen Zenobia (which lived aboute the yere after the incarnacion of Christe 274, the noble Aureliane being emperoure of Rome) by the example of hir life, confirmeth his argumentes, and also vanquisshe the obstinate mynd of froward Caninius, and so endeth the matier.”

Zenobia is called upon to account for the fact that she did not marry before the age of “twenty and above”. The reason was that the years between sixteen and twenty were given to study, especially in moral philosophy. She shows the use which this study afforded to her when she married, and the great advantage it was to her, as a widow, in the choosing of tutors for, and in bringing up of her children. She therefore considers it well that a maiden should “well tarry” before she marries, so as to give herself up to earnest and continued study. Her conclu-

sion on the subject of what we call the higher education of women is: "I see well enough, that women, beyng well and virtuously brought up, do not only with men participate in reason but some also in fidelity and constancy be equall unto them."

Elyot (Sir Thomas).

The Image of Governance compiled of the Actes and Sentences notable, of the moste noble Emperour Alexander Seuerus, late translated out of Greeke into Englyshe by Syr Thomas Eliot, knyght in the fauour of Nobylitie. T. Berthelet, 1541. 4to.

"And this present book which I have named the Image of Governance shall be to all them which will read it sincerely a very true pattern, whereby they may shape all their proceedings."

This Image of Governance has an interesting preface, which contains some account of his previously written books, by himself. The book was written when "almost fatigate with the long study about the correcting and ampliing of my Dictionary, Latin and English."

The names of the following books, written by Sir Thomas Elyot, though not definitely bearing on education, are added to make the list of his works complete.

Pasquyll the Playne. 1533 and 1540. T. Berthelet. 16mo.

A dialogue between Pasquillus, Gnato, and Harpocrates on the advantages of speech and silence. The title Pasquyll, "although he may be merry and plain, teaching as well servants how to be faithful unto their maisters, as well as maisters how to be circumspect in espying of flatterers."

The Castell of Helth. T. Berthelet. 12mo. 1534, 1539, 1541, 1564, 1572, etc.

After writing this book, Elyot was plainly told by doctors that he had much better write on matters with which he was better acquainted. They admitted that he was "prettilly seen in histories", but denied that he was "learned in Physick". Elyot replies:

For before that I was twenty years old a worshipful physician [supposed to be Linacre] and one of the most renowned at that time in England, perceiving me by nature inclined to knowledge read unto me the works of Galen * * * and some of the aphorisms of Hippocrates. And afterward by mine own study I read over in order the more part of the works of Hippocrates, Galen, Oribasius, Paulus Celius, Alexander Trallianus, Celsus, Plinius the one and the other, with Dioscorides. Nor did I omit to read the long canons of Avicenna, the commentaries of Averroys, the practices of Isake, Haliabbas, Rasis, Mesue * * *.

This may be taken as a representative list of authors in a good medical education of the time. Elyot once more delights in having written a book in English, and says, with his spirit aroused:

If physicians be angry that I have written physicke in English, let them remember that the Greeks wrote in Greek, and Romans in Latin, Avicenna and the other in Arabic, which were their own proper and maternal tongues. And if they had been as much attacked with envy and covetise, as some now seem to be, they would have devised some particuler language, with a strange cipher or form of letters, wherein they would have written their science, which language or letters no man should have known, that had not professed and practiced Physick. But those, although they were Paynims and Jews, yet in this part of charity, they far surmounted us Christians, that they would not have so necessary a knowledge as Physic is, to be hid from them, which would be studious about it.

How one maye take profite of his enemyes. Translated from Plutarche. T. Berthelet. n. d. 8vo.

A Preservative agaynste deth. Berthelet, 1545.

This consists of passages from the Old and New Testaments, and from the fathers of the Church. Elyot, in his preface, shows his fear lest, as in his "Castell of Helth" he had stirred the doctors, now in his "Preservative" he should offend by encroaching on the domain of the priests. Yet, he concludes, "no Christian man is excluded to give good counsel."

The Dictionary of Sir Thomas Eliot knyght. Londini in ædibus Thomæ Bertheleti typis impress. Cum privilegio ad imprimendum solum. fol. 1538.

This book marks an interesting point in the history of copyright. For in it is a copy of Henry VIII's "gracious privilege" to Thomas Berthelet to print Eliot's Dictionary, and an injunction that no one during the life of Berthelet should print any manner of books which he had first printed, or should "print again on other men's corrections the same within the space of six years next ensuing the printing of every such book."

Elyot's Preface is addressed to Henry VIII and is full of subservient loyalty. Elyot declares how he first began his Dictionary, in spare time from his busy life, and found that he could not thus make a perfect dictionary, but had been encouraged by the king to proceed. Dissatisfied with what he had already done he says, "I caused the printer to cesse, and beginning at the letter M where I left, I passed forth to the last letter with a more diligent study. And that done I eftsones returned to the fyrst letter, and with a semblable diligence performed the remenant."

The following passage gives an insight into Elyot's manner of making his Dictionary and into the materials at hand:

I well perceyued, that all though dictionaries had been gathered one of another, yet nethelasse in eche of them ar omitted some latin wordes, interpreted in the bokes, whiche in order preceded. For Festus hath manye, which are not in Varros Analogi: Nonius hath some, which Festus lacketh: Nestor toke nat all that he founde in them bothe. Tortellius is not so abundant as he is diligent: Laurentius Valla wrate only of wordes, which are called elegancies, wherein he is undoubtedly excellent: Perottus in Cornucopie, dyd omitte almost none that before him were written but in wordis compounde he is to compendious: Fryere Calepine (but where he is augmented by other) nothyng amended, but rather appaired that which Perottus had studiously gathered: Nebressensis was both well lerned and diligent, as it appereth in some wordes, which he declareth in latin: but because in his dictionarie wordes are expounde in the Spanish tunge, which I do not understand, I can nat of hym shewe myn opinion: Budens in the exact triall of the native sence of wordes, as well greke as latine is assuredly right comendable, but he is moste occupied in the conference of phrasis of bothe the tungen, whiche in comparison are but in a fewe wordes: Dyvers other men have written sondry annotations and commentaries on olde latine authors, among whom also is discord in their expositions.

Elyot feels that amongst men of so great reputation as these it is rash for him to enter the lists, but the "comfort" which he had lately received from the king had caused his spirit to be revived and set up the "sail of good courage." And he dares affirm that, having finished the Dictionary after two years' labour, "there may be found a thousand mo latin wordes than were in any one Dictionarie published in this royaume."

The "Dictionarie" was improved and issued (fol.) in 1553 under the title:

Bibliotheca Elioteæ. Eliotes Dictionarie the second tyme enriched and more perfectly corrected, by Thomas Cooper. In ædibus T. Bertheleti: Londini.

This was eventually expanded by Cooper into the *Thesaurus Linguae Romanæ* et *Britannicæ* in 1565, and republished 1573, 1578, 1584.

The following book contains a reference to Elyot's "Dictionarie," and shows how Elyot's work was continued and developed.

An Alvearie or Triple Dictionarie in Englishe, Latin, and French: Very profitable for all such as be desirous of any of those three languages. Also by the two Tables in the ende of this booke, they may contrariwise, find the most necessary Latin or French wordes, placed after the order of an Alphabet, whatsoever are to be founde in any other Dictionarie: And so to turn them backwardes againe into Englishe when they read any Latin or French authors, and doubt of any hard worde therein. 1573. Second edition 1580.

The Alvearie is by John Baret, a fellow of Trinity College, Cambridge.

The Address to the Reader gives so picturesque and vivid a view of teaching at the time that it is too interesting to omit.

BARET AND HIS PUPILS.

About eyghtene yeares agone, having pupils at Cambridge studious of the Latin tongue, I used them often to write epistles and themes together, and daily to translate some peece of English into Latin, for the more speedy and easie attaining of the same. And after we had a little begunne, perceyving what great trouble it was to come running to mee for every word they missed, knowing then of no other Dictionarie, to helpe us, but Sir Thomas Eliot's Librarie, which was come out a little before, I appoynted them certaine leaves of the same booke every day to write the English before the Latin, and likewise to gather a number of fine phrases out of Cicero, Terence, Cæsar, Livie etc. and to set them under severall Tytles, for the more ready finding them againe at their neede. Thus within a yeare or two they had gathered together a great volume, which (for the apt similitude betweene the good scholars and diligent Bees in gathering their wax and honny into their Hive) I called them their Alvearie both for a memoriall by whom it was made, and also by this name to encourage other to the like diligence, for that they should not see their worthy prayse for the same, unworthily drowned in oblivion.

HOW THE DICTIONARIE CAME TO BE PUBLISHED:

Not long after, divers of our friendes borrowing this our worke which we had thus contrived and wrought onely for our owne private use, often and many wayes mooved me to put it in print for the common profit of others and the publike propagation of the Latin tongue: or else to suffer them to get it printed at their proper costs and charges. But I both unwilling, and halfe ashamed to have our rude notes come abrode under the vewes of so many learned eyes, and especially finding no leasure from my prefixed studies for the polishing of the same, utterly denied their request, untill at length comming to London, the right worshipfull Maister Powle and Maister Garth, with other and singular favourers of all good learning and my very especiall friendes, with their importunate and earnest exhortations had cleane overcome my contrary minde. Then immediately laying aside all other studies, I was faine to seeke for writers and workemen about the same, to make it readie for the presse.

BARET GOES TO HIS OLD PUPILS FOR HELP.

Therefore I went to divers of mine olde pupils then being at the Innes of Court, deliuering each of them some part of their olde discontinued worke to see it written faire againe (and for other peeces which I thought unperfect, I gat certayne of ye best scholars of two or three schooles in London to write after my prescription): but in the French and Tables, although I had before traueyled in divers countries beyonde the seas, both for language and learning; yet not trusting to mine owne skill, I used the help of M. Chalmer and M. Claudius.

It may be mentioned that for Baret's Alvearie, Richard Mulcaster wrote a commendatory Latin quatrain for the 1st edition, which he exchanged in the 2nd edition for a Latin poem of 30 lines.

The progress of dictionary-making is an interesting chapter in the history of Education. But it is not within the scope of this book to include even a general sketch. The course of the development of dictionaries may be studied by reference to the works quoted in the following authorities:

1. In the Appendix to Mr Way's edition of the *Promptorium*: Notices of Glossaries, Vocabularies and other works, illustrative of the English Language and of Mediæval Latinity and used for the most part in this edition of the *Promptorium*. The full title of the book is: *Promptorium Parvulorum, sive Clericorum, Dictionarius Anglo-Latinus Princeps, Auctore Fratris Galfrido Grammatico dicto, ex ordine Fratrum Predicatorum, Northfolciensi, Circa 1440*. Edited by Albert Way, M. A. for the Camden Society, London, 1865.
2. J. E. B. Mayor's Latin-English and English-Latin Lexicography, in the *Journal of Classical and Sacred Philology*, December 1855, and March 1857.
3. Chronological Notices of the Dictionaries of the English Language, by Henry B. Wheatley, Esq., in the *Transactions of the Philological Society*, London, 1865.
4. Article *Dictionary* in the *Encyclopædia Britannica*. Ninth edition, 1877.
5. The Romanes Lecture in the University of Oxford, 1900, by Dr J. A. H. Murray, Editor of the Oxford Historical Dictionary, on The Evolution of English Lexicography.

Dr Murray traces the development of the dictionary through the stages of glosses and glossaries, through vocabularies, and he might have added nomenclators. He

mentions the *Medulla Grammatices*, the *Ortus* (i. e., *Hortus*) *Vocabulorum* of 1500; the *Promptorium Parvulorum*,¹ i. e., *Children's Store-room*, about 1440; 1483, the *Catholicon Anglicum*; in 1538, Sir Thomas Elyot's *Dictionary*;² in 1554, J. Withals' *Short Dictionary for Young Beginners*. He then names William Horman's *Vulgaria*, 1519; Huloet's *Abecedarium*, 1552; and Baret's *Alvearie*, 1573; in 1570, Peter Levins' *Manipulus Vocabulorum* (an English rhyming dictionary). English dictionaries are then tracked through Robert Cawdrey, 1604, *The Table Alphabetical of Hard Words*; 1616, Bullokar's *English Expositor*; 1623, Henry Cockeram's *English Dictionary*; the *Glossographia* of Thomas Blount in 1656; and *The New World of Words*, of Edward Phillips, of 1658. The whole lecture of Dr. Murray is very interesting and should be read as a whole on the subject.

Dr Murray also mentions the following:

FRENCH.

1521. Alexander Barclay.³
Introductory to write and pronounce Frenche.
1537. Giles du Guez (or du Wes).
Introductory for to lerne to rede, to pronounce & to speak French trewly.
1530. John Palsgrave.
Esclaircissement de la Langue Françoise.
1611. Randall Cotgrave.
French English Dictionary.

POLYGLOTT DICTIONARY.

Minshen, John

Ηγεμων εις τας Γλωσσας, id est, *Ductor in Linguas*. The Guide into Tongues. Cum illarum harmonia, et etymologiis, Originationibus, Rationibus, et Derivationibus, in omnibus his undecim linguis, viz. 1. Anglica. 2. Cambro-Britanica. 3. Belgica. 4. Germanica. 5. Gallica. 6. Italica. 7. Hispanica. 8. Lusitanica seu Portugallica. 9. Latina. 10. Græca. 11. Hebraea. Lond. 1617. fol.

2nd ed. of 1626 contains also an exposition of the terms of the "Lawes of this Land," with the etymologies of proper names of the Bible.

WELSH.

Salesbury (Wm.).

A Dictionary in Englyshe and Welshe, moche necessary to all suche Welshemen as will spedly learne the Englyshe tōgue * * * whereunto is p̄fixed a little treatyse of the englyshe pronūciation of the letters. B. L. Few MS. notes in Brit. Mus. copy. J. Waley, London, 1547. 4to.

SPANISH.

1599. Richard Percevall, Gent.
Dictionary in Spanish and English.

ITALIAN.

1599. John Florio. (Italian-English.)
World of Words. Republished in 1611 as *Queen Anna's New World of Words*.

I add here names of further dictionaries. Dr. Murray is concerned to show the development of dictionary-making, but such a list as the following (though not complete) may serve to show some of the variations from the types. It should be added that books like the *Officina* of Ravisius Textor (1522) and the numerous phrase-books in many cases served as dictionaries for school use.

Marbecke (John).

A Concordāce, that is to saie, a worke wherein by the ordre of the letters of the A. B. C. ye maie redely finde any worde conteigned in the whole Bible etc. (by J. M.) 1550. fol.

¹ Edited by Mr Albert Way for the Camden Society. 1865.

² Thomas Cooper, Dr. Murray points out, not only edited three editions of Elyot's *Dictionary* but in 1555 compiled his *Thesaurus* based on Robert Stephen's work.

³ Barclay also wrote a *Grammatica Latina*. 1516. 4to.

Harrison (Luke). Printer.

A Dictionary French and English. Lond. 1570.

Crespin (Jean). Edited by Grant, E.

Lexicon Græco-Latinum * * * repurgatum * * * multisque vocabulorum Chiliadibus locupletatum, opera et studio E. G[rant]. H. Bynneman, 1581. 4to. (Originally appeared at Geneva, 1562. 4to.)

Waddington (Rudolphus).

A Dictionarie in Latin and English, heretofore set forth by Master John Veron, and now newly corrected and enlarged; for the utilitie and profit of all Young Students in the Latine Toong, as by further search therein they shall find. Lond. 1584. 4to. (Originally published, according to Watt, Lond., 1575.)

Patten (William).

Calendar of Scripture; wherein the Hebrew, Chaldean, Arabian, Phœnician, Syrian, Persian, Greek and Latin names of Nations, Countreys, Men, Weemen, Idols, Cities, Hills, Rivers, and of other places in the Bible mentioned, by order of Letters, are set and turned into our English Toonge. B. L. Lond. 1575. 4to.

An exposition of certaine difficult and obscure wordes, and termes of the lawes of this Realme * * * in French and English, for the helpe of such yonge Students as are desirous to attaine the knowledge of the same. R. Tottel, 1579. 8vo. Also 1602, 1629, 1636.

Hutton (Richard).

Lexicon Latino-Græco-Anglicum ad Gul. Morelii Archetypum, accuratissime excusum. Lond. 1583.

Martinus (Petrus).

The Key of the Holy Tongue; wherein is conteined, first the Hebrue Grammar (in a manner) woord for woord * * * out of P. Martinus. Secondly, a pratize upon the 1st, 25th, and 68th Psalmes, * * * Thirdly a short Dictionary containing the Hebrue woords that are found in the Bible with their proper significations. All Englished by I. Udall. 3 pts. Francis Raphelengius, Leyden, 1593. 8vo.

Minshen (John).

A Dictionary in Spanish and English * * * Enlarged * * * by J. Minshen. 1599. fol. (See Richard Percivall.)

Withals (John).

A dictionarie in English and Latine * * * with Phrases * * * Recognised by Dr Evans; after by A. Fleming; and then by W. Clerk. And now at this last impression enlarged with an increase of words, sentences, etc. T. Purfoot, London, 1616. 8vo.

Minshen (John).

Vocabularium Hispanico-Latinum et Anglicum copiosissimum, etc. A most copious Spanish Dictionary, with Latine and English (and sometimes other Languages) and enlarged with divers thousands of Words, etc. Lond. 1617. fol.

Rider (John) and Holyoke (F.).

Rider's dictionarie corrected, and with the addition of above five hundred words enriched. Heereunto is annexed a Dictionary etymologicall, deriving everie word from his native fountaine * * * by F. Holyoke. Eng. Latin. 2 pts. A. Islip for T. Man, London, 1617. 8vo. 1621, 1623, 1633, 1641.

Featley (Daniel).

A complete Concordance to the Bible of the last translation, etc. (With a preface by D. F. etc.) 1631. Fol.

Cotton (Clement).

Complete Concordance to the Bible of the last translation, 1631. fol.

Davies (John).

Dictionarium Latino-Britannicum. Begun and greatly improved by Thomas Williams, Physician, before 1600. To which is added, Adagia Britannica, Authorum Britannicorum Nomina et quando floruerunt. 1632.

Sherwood (Robert). Cotgrave.

A Dictionarie of the French and English tongue * * * Whereunto is also annexed a * * * Dictionarie, of the English set before the French by R[obert] S[herwood] L[ondoner] 1632. fol.

Therndike (Herbert).

Epitome Lexici Hebraici, Syriaci, Rabbinici et Arabici, una cum Observationibus circa Linguam Hebræam et Græcam. Lond. 1635. fol.

Alabaster (William).

Lexicon Pentaglotton, Hebraicum, Chaldaicum, Syriacum, Talmudico-Rabbinicum, & Arabicum, etc. Guilielmus Jones, Londini, 1637. fol.

Barlement (Noel).

Colloquia et Dictionariolum octo Linguarum; Latinae, Gallicae, Belgicae, Teutonicae, Hispanicae, Italicae, Anglicae, & Portugallicae, etc. By N. Barlement. Excudebat E. G. impensis Michaelis Sparke, Londini, 1639. obl. 8vo.

Bagwell (John).

In. T. Wilson's A Christian Dictionary * * * Whereunto is * * * added a large edition, both of words and phrases, by J. B. (1640?) 8vo.

Pasor (George).

Lexicon Græco-Latinum in Novum Testamentum. Lond. 1644, 1650. 8 vo.

Rowley (Alexander).

The Scholar's Companion; or all the Words in the Greek and Hebrew Bible interpreted, by A. R. Lond. 1648. 8vo.

Hexham (Henry).

English and Nether-Dutch Dictionary. Rotterd. 1648. 4to. Enlarged and enriched by Dan. Manley. Rotterd. 1675, 1678. 4to.

Robertson (William).

A Gate or Door to the Holy Tongue, containing i. The chief and necessary Grounds of the Hebrew Grammar; ii. A Table for the Hebrew Roots, etc. Part First. Lond. 1653. 8vo. Part Second, being a compendious Hebrew Lexicon, or Dictionary, etc. Lond. 1654. 8vo.

Walker (William).

The Taste of English and Latin Phraseology, or a Dictionary of English and Latin Idioms. Lond. 1655. 8vo. Enlarged. Lond. 1670.

Edmondson (Henry).

Lingua Linguarum; or a Vocabulary in Latin and English. Lond. 1655. 8vo.

Symson (Andrew).

Lexicon; or English, Greek and Latin Concordance of the New Testament. Lond. 1658. fol.

Somner (William).

Dictionarium Saxonico-Latino-Anglicum cum Grammatica et Glossario Ælfrici. Oxon. 1659. fol.

Dugard (William).

Lexicon Græci Testamenti alphabeticum. Una cum explicatione grammatica vocum singularum * * * apposita, etc. London 1660. 8vo.

Dugard's Lexicon.

"Mr. Dugard hath lately completed his Lexicon Græci Testamenti Alphabeticum [etc.]; which, were it once committed to the press, as it now lieth ready in his hand, would be a most excellent help to young scholars to proceed in the Greek Testament of themselves, in an understanding and grammatical way. And I hope it will not be long ere he publish it for common use."—Chas. Hoole.

CHAPTER XVIII.

THIRD ANNUAL CONFERENCE OF THE ASSOCIATION OF CATHOLIC COLLEGES.¹

HELD IN CHICAGO, APRIL 10, 11, AND 12, 1901.

CONTENTS.—Officers of the association—Delegates present—President Conaty's address: "The Catholic college of the twentieth century"—Paper by Rev. James A. Burns: "Catholic secondary schools"—Letter from the apostolic delegate—Paper by Rev. Henry J. DeLaak: "The teaching of science"—Paper by Rev. Laurence A. Delurey: "The teaching of history in college"—Paper by Prof. Edmund J. Ryan: "The teaching of English in college"—Discussion: "Educational legislation in the United States"—Report of committee on entrance conditions, Rev. James P. Fagan, chairman—Paper by Rev. Candidus Eichenlaub: "Greek in our Catholic colleges."

OFFICERS OF THE ASSOCIATION, 1901-1902.

President: Rt. Rev. Mgr. Thomas J. Conaty, D. D., rector Catholic University, Washington, D. C.

Standing committee: Rt. Rev. Mgr. Conaty, ex officio chairman; Rev. John A. Conway, S. J., Gonzaga College, Washington, D. C., secretary-treasurer; V. Rev. P. Vincent Huber, O. S. B., president St. Bede College, Peru, Ill.; V. Rev. William L. O'Hara, A. M., president Mount St. Mary's College, Emmitsburg, Md.; Rev. James French, C. S. C., vice-president Notre Dame University, Notre Dame, Ind.; Rev. L. A. Delurey, O. S. A., President Villanova College, Pa.

DELEGATES PRESENT.

Rt. Rev. Mgr. Conaty, D. D., Catholic University of America, Washington, D. C.
Rev. Benedict Boebner, C. PP. S., president St. Joseph's College, Collegeville, Ind.

Rev. Aloysius Bradley, O. S. B., St. Benedict's College, Atchison, Kan.; St. Bernard's College, Cullman County, Ala.

Rev. John C. Burke, S. J., vice-president St. Louis University, St. Louis, Mo.

Rev. J. A. Burns, C. S. C., president Holy Cross College, Washington, D. C.

Rev. A. J. Burrowes, S. J., president Marquette College, Milwaukee, Wis.

Rev. P. V. Byrne, C. M., president St. Vincent's College, Chicago, Ill.

Rev. John P. Carroll, D. D., president St. Joseph's College, Dubuque, Iowa.

Rev. Francis B. Cassilly, S. J., vice-president St. Ignatius, Chicago, Ill.

Rev. Wm. F. Clark, S. J., vice-president St. Francis Xavier's, New York, N. Y.

Rev. John A. Conway, S. J., vice-president Gonzaga College, Washington, D. C.

Rev. Henry J. DeLaak, S. J., St. Louis University, St. Louis, Mo.

Rev. Laurence A. Delurey, O. S. A., Villanova College, Villanova, Pa.

Rev. Albert A. Dierckes, S. J., president St. Francis Xavier's, Cincinnati, Ohio.

Rev. Bruno Doerfler, O. S. B., vice-president St. John's University, Collegeville, Minn.

¹ The papers, addresses, discussions, etc., contained in this chapter are reprinted from the report of the proceedings of the conference.

- Rev. John F. Dolphin, M. A., president College of St. Thomas, St. Paul, Minn.
 Rev. C. J. J. Donegan, S. J., Gonzaga College, Spokane, Wash.
 Rev. M. P. Dowling, S. J., president Creighton University, Omaha, Nebr.
 Rev. Candidus Eichenlaub, O. S. B., St. Bede's College, Peru, Ill.
 Rev. James P. Fagan, S. J., vice-president Georgetown College, Washington, D. C.
 Brother Fidelis, rector St. Francis's College, Brooklyn, N. Y.
 Rev. James D. Foley, S. J., president Detroit College, Detroit, Mich.
 Rev. P. J. Franciscus, C. S. C., representing St. Edward's College, Austin, Tex.
 Rev. Jas. J. French, C. S. C., Notre Dame University, Notre Dame P. O., Ind.
 Rev. Martin A. Hehir, C. S. Sp., Holy Ghost College, Pittsburg, Pa.
 Rev. John U. Heinzel, S. J., Canisius College, Buffalo, N. Y.; St. Ignatius College, Cleveland, Ohio; St. John's College, Toledo, Ohio; Sacred Heart College, Prairie du Chien, Wis.
 Rev. E. A. Higgins, S. J., Santa Clara College, Santa Clara, Cal.; St. Ignatius's College, San Francisco, Cal.
 Rev. W. C. Hoctor, C. M., St. John Baptist College, Brooklyn, N. Y.
 Rev. Vincent Huber, O. S. B., rector St. Bede's College, Peru, Ill.
 Rev. J. Kosinski, C. R., vice-president St. Stanislaus' College, Chicago, Ill.; St. Mary's College, St. Marys, Ky.
 Rev. Michael Leary, S. J., St. Mary's College, St. Marys, Kans.
 Rev. P. Nicholas Leonard, V. F. M., St. Francis Solanus' College, Quincy, Ill.
 Rev. A. A. Malloy, C. M., St. Vincent's College, Chicago, Ill.
 Rev. Andrew J. Morrissey, C. S. C., president Notre Dame University, Notre Dame, Ind.
 Rev. Wm. L. O'Hara, C. M., Mt. St. Mary's College, Emmitsburg, Md.
 Rev. John N. Poland, S. J., St. Xavier College, Cincinnati, Ohio.
 Rev. J. F. Quirk, S. J., vice-president Boston College, Boston, Mass.
 Rev. E. L. Rivard, C. S. V., St. Viateur's College, Bourbonnais, Ill.
 Prof. Edmund J. Ryan, M. A., Mt. St. Mary's College, Emmitsburg, Md.
 Rev. Chas. B. Schrantz, S. S., M. A., St. Charles' College, Ellicott City, Md.
 Rev. J. A. Tracy, C. M., Niagara University, Niagara County, N. Y.
 Rev. Antoine Wilmer, O. M. Cap., rector St. Lawrence College, Mount Calvary, Wis.; St. Fidelis College, Herman, Pa.

The conference was formally opened by the Rt. Rev. Mgr. Conaty, rector of the Catholic University, with an address on

THE CATHOLIC COLLEGE OF THE TWENTIETH CENTURY.

I have no intention to speak as a prophet, nor have I any special knowledge by which I may discern clearly and describe accurately the college of the future. My purpose in this paper is rather to place before you certain facts which may serve as a basis for the solution of the problems of the future. In the perfecting of our collegiate system we should know the difficulties that surround us, find means for solving them, and thus aid this conference in reaching some practical results. My point of view is not so much the detail of college life as it is a larger and broader view of the college as an element in our educational system.

It would be most interesting to study the work of Catholic collegiate education in the United States in the century which has just closed, and which has culminated in the establishment of this conference of Catholic colleges. To describe our first attempts at collegiate instruction, to watch the gradual development of the college from one diocese to another, to note the increase and improvement in our colleges, until to-day nearly 200 institutions designated as colleges are com-

peting in one form or another in the field of higher education, would indeed furnish opportunities for serious study. Originally intended as feeding schools for the theological seminary, they have also developed preparation for the professions and business. The religious orders, with their centuries of traditions as teachers and educators, have built their college systems upon methods which have to their credit the successes of the past in the education of mankind. Prepared by years of careful study and sanctified by sacrifices, they have been honored by the results. The Benedictine, the Franciscan, the Augustinian, the Dominican, the Jesuit—these names represent a body of teachers who have preserved civilization and educated the world. The system of church schools developing into the university has been the foundation stone upon which the success of the Church as a teacher among the nations has been built. During the hundred years of our educational life these and other religious orders have been the fostering parents of the schools in which the college training of our American Catholic youth for the greater part has been received. Institutions established and maintained by the diocesan clergy and laymen have acted no small part in our educational development and are to-day prominent factors.

It is not necessary to dwell on the difficulties experienced during a century of development, from the day when Georgetown College in 1789 opened its doors to instruction in classics until the eventful day in 1889, one hundred years later, when the Catholic University welcomed to its graduate school in theology the representatives from the different dioceses of the country and began the work which has since developed into a great university. The French Revolution, which was so destructive of the external development of Catholic educational work in France, the trials and difficulties under which the English-speaking Catholic world labored in the maintenance of all forms of religious effort, the newness of this great country, which had opened its doors to the refugees from tyranny in all sections of the world—all these presented a serious handicap to the development which the church so ardently desired. Missions had to be established, chapels and churches built, and missionaries found to care for the spiritual wants of a rapidly increasing population. For the first fifty years this demanded the largest share of church interest. The school, the college, the university, representing the intellectual growth of the people, were to follow what might be called the brick and mortar period in church building. Then, again, large means were lacking among the people, who were mostly poor and generally exiles flying from tyranny and oppression abroad. Wealth was not found to any extent among the Catholic people; yet the spirit of sacrifice which dominated them is nowhere more evident than in their unwillingness to accept the education which the State schools, supported in part by their taxes, stood ready to give them. They submitted to a double taxation in order that they might establish and maintain parish schools in which their children might receive the blessings of a religious education. Competition with richly endowed State schools has not resulted in diminishing the luster of the record which the Catholic educational system has made. We need but refer here to the exhibit at the World's Fair in 1893 and listen to the encomiums passed on the educational results obtained in the Catholic schools. A college development, built upon a somewhat different basis from that of the parochial school, yet experiencing much of its difficulty, is glorified by much of its sacrifice, and shares in the same results. We owe almost wholly to the religious orders the foundation of the collegiate institutes which, without their unselfish devotion, would have been unable to live. We now have an almost complete system in educational work, which may well be called the educational system of the church, and which, despite all difficulties, may claim its right as a factor in the educational life of this country. The last century witnessed the foundation and growth of this system; the present century has for a duty its perfect development.

Though we have much to be proud of, and though we may point with pride to

the results of the last one hundred years, it is unwise for us not to realize that entering upon the new century we are practically at a very critical period. Against our system, as against the systems of all private schools, and especially religious ones, is the well-equipped and thoroughly unified organization of State instruction sustained by public funds. Starting with the primary grades, reaching as a desired result to the completion of intermediate work, the State system at public expense has developed into the high schools, and in many States maintains the university, in which, at public expense, even professional schools are found. The trend is toward national unification and national education which, we may remember, in 1871 were laid down as the planks in the platform of a great national political party.¹ All powers of government were to be centralized in the General Government, and social and religious unification was to be established by means of universal and compulsory education. It has also been said recently, by a prominent educator, that the past century has witnessed the organization of system in education, and that the State and State alone has been the controlling influence in education; adding that before this century the church controlled it. The mighty machine of secularized education is threatening to destroy all effort on the part of the individual or the church in the fields of educational endeavor. To unify and solidify, as well as to improve our system in all its parts, from kindergarten to university, is most urgent, and inasmuch as the college is an important element in the system the main purpose of this conference is to consider its place and duty. Whether we shall succeed in blocking the way of absolute State control in education, and thus secure the success of Catholic education in the twentieth century, may largely depend on the action of this association. To my mind there never has been a more critical moment in the battle of religious education against the secularized ideal than at the present time. I believe that danger is imminent to all forms of private schools and colleges, and it behooves us, devoted as we are to the idea of religion in education, to so build our system that it may be proof against all attacks of the nonreligious system. Christianity is dependent upon the life of the Christian school idea.

The paternal idea in education is being carried very far. The Washington Post, which has combated paternalism, said, editorially, in its issue of April 3: "All shades of political belief and all sorts and conditions of men seem to have accepted this tremendous expansion of the free-school idea as a proper exercise of the taxing power." It is important for us to take counsel together, strengthen our position, and solidify our system while we have yet full liberty to act. The danger from State legislation interfering in every possible way with private enterprise in education, the disposition of every experimentalist, in the name of education, to still further enlarge the sphere of State paternalism, the ever-increasing encroachment of State universities upon all forms of public instruction, even in private schools, the disposition to centralize education to the extent of national control, and last but not least, the political machine which threatens to lay hands upon educational forces for its own ends—all these are reasons which urge us in self-protection to safeguard the principles upon which our education depends and bind together all parts of our system for the purposes of successful defense. The time for isolated action is past. As educators we must not allow ourselves to be occupied exclusively with minor present advantages. The mere success of the particular system to which we may belong, or the immediate results from the particular well-equipped institution of which we are a part, should not blind us to the fact that the system as a whole is in danger and demands our earnest, unselfish consideration and devotion. In the struggle in which we are engaged other motives than those of education should not absorb our attention. The only way to secure even a particular interest is by concerted action for the general

¹ Henry Wilson, *Atlantic Monthly*, January, 1871.

good. All for each and each for all, that there may be no weak strand in the chain which binds us together, for the test of the system is in the weakest and not in the strongest part.

Until the present the general church interest has cared for us and aided us to success. Conditions are changing, and the mere name Catholic is not enough. We are to be judged by results and must submit to comparisons with other systems. No allowance will be made for our poverty or our weakness. We must compete with the best and in the ways in which the best-equipped colleges work or we lose the field. Hence more system is demanded. There must be a differentiation of the elements that unite to form the system. Business is dividing labor so as to reach better results. The master of all trades is a thing of the past. The man needed is the man who can do at least one thing well rather than many things poorly. We suffer from lack of definition of terms. We need to know just what we are expected to do, that there may be no overlapping nor confusion in our work. While we hold in general to the principle of a four-years' course for an A. B. in classics one college ideal is clearly defined. The entrance conditions and the qualifications for an A. B. degree show us the limits within which our collegiate work lies. This conference will discuss the first, and I trust that we shall soon consider the second. The moment seems ripe for our colleges to cease to be preparatory schools as well as colleges. Separate the two very distinctly, and leave to the preparatory school or high school what is but the fitting for college. Overlapping brings confusion, divides our attention, prevents concentration upon our real work, and leads to weakness and injury. There need be no friction and no jealousy once we have carefully defined and set apart the different elements of the system and insisted that each part shall do the work for which it has been fitted. What we need is not more colleges, but that our colleges do good college work.

It is well for us to be thoroughly acquainted with the facts of the situation, in order that we may intelligently discuss this question. To open a school or college, and to make it a part of the educational system, may seem to be a very simple matter of supply and demand. The school is opened, the people urged in the name of religion to patronize it, the instruction we deem best given, degrees after a time conferred, and then there is a certain pointing of pride to the alumni occupying the positions of honor and trust in the community. All this may be true, and yet only be on the surface; the real situation is much more complicated than such statements would warrant. Let us examine the facts which lie around and about these, and which our educational system has really to face. The first fact we meet is the general extent of the State school system, with its rapidly increasing high school, college, and even university development. The free school was originally aimed to fit the people for the ordinary needs of citizenship, and was established particularly against illiteracy. Developed as it is at the present time, it aims to fit students for the practical business of life, as also to give them admission directly to the university. Its purpose seems to be to make the step easy from the State school to the State university. The addition to the high-school course makes it possible for the university to stoop down and assume the higher grades of collegiate work, and thus, by copying the German model, to do away altogether with the college. This is a condition growing more and more threatening, which stands face to face with our collegiate system. A second fact is to be noted in the institutions of all sorts that are being endowed by the private munificence of non-Catholics. Business colleges, schools of engineering, art schools, conservatories of music, trade schools are springing up in all large centers, attracting even Catholic students, and doing so the more easily because they do not appear as State schools, but rather as the effort of generous individuals in the broader education of the public. But the fact remains they are not Catholic, and the tendency in teacher and instruction is not toward a respect for the Catholic ideals. This must surely be reckoned with, as our educational system faces the problem. We may find a

third fact in the effort very clearly defined during the past few years by which universities with rich endowments are striving for the control of State schools, the dictation of the schedule of work, the papers for the examination of teachers, the definition of the scope and purpose of all public instruction, the desire to have all teachers receive the university degree or certificate of university approval. The trend of educational legislation is the result in many quarters of the universities' desire for control of all schools—private as well as public. The history of school boards in many of our large cities would show us that all those who desire to become teachers, no matter where they have been instructed nor what may be their qualifications, are forced in some way to be approved either by the universities or by the normal schools or by the regulations suggested by either or both. Examples are not wanting to substantiate this fact. We have only to remember the discussions in the Chicago schools and elsewhere and the attempts in some of our State legislatures for enactments along these lines.

There is another fact which we would do well to carefully consider, and it is that which refers to strictly scientific publications. We have only to consult the library table of every scientific department to find that such publications come largely from non-Catholic sources and chiefly from universities equipped in every way for research. Even the more popular publications which flood the market regularly and are read on all sides, even by Catholics, spring from practically the same source. They are all helps in the education of the people, and they impress upon them the idea that for anything first-class in science or literature they must go to a non-Catholic source. By constant experience with these statements our Catholic people are led to look upon the scientific and literary work of Catholics as something quite inferior. It seems to me that these are some of the hard facts which stand over against us in our educational work.

To offset this there is the very patent and splendid fact that the Catholic Church, out of her poverty, and in spite of all other serious demands upon her for church and charitable development, has spent on education during the past year the magnificent sum of \$25,000,000 and has had under her educational training over 1,000,000 pupils, 13,000 of whom were under Catholic collegiate instruction. In this estimate there is no account of the money spent for buildings. This means on the part of thousands of teachers most conscientious self-sacrifice, on the part of parents generous devotion to conscience and an ideal, and on the part of students the willing sacrifice of the best years of their lives.

During the first half of the century a very small proportion of Catholic children found it possible to go beyond the grammar grade of school; in fact, the same was proportionately true of all children. The increase in collegiate attendance during the past fifty years, in view of the circumstances, has been remarkable, while the number seeking advanced courses has necessarily been small. It is safe to say that in this century, as in the past, the parochial school and the college will continue to supply the demand of those who, for one reason or another, will not be able to pursue advanced courses; but it is also true that, with the material development of the Catholic element in our population, the number of students able and willing to obtain the university advanced degrees will be much larger. The danger from the high-school movement to the collegiate and university parts of our system, to my mind, is greater than even that which threatens the parochial school. Hence I assert that this is one of the most important problems for the college. Take the high school from our system, or neglect to develop it according to the demands of the people, and you are practically forcing the graduates of your parochial schools into the State high schools, which, even more in the future than in the past, are to be the feeders upon which the universities depend. The problem is before us and is becoming more and more urgent, Shall Catholic undergraduate schools serve as feeders to non-Catholic universities? It is not merely the question, which of itself is a serious one, Shall Catholic colleges aim

to fit students for non-Catholic universities? The question is deeper and farther reaching. Shall Catholic parochial schools aim to fit them for preparatory schools which lead to non-Catholic colleges as well as non-Catholic universities? Can we consistently urge Catholics to send their children to lower Catholic schools, and then, when these children are a few years older and are just beginning to think seriously, shall we encourage them to enter the non-Catholic colleges and universities? The danger from the non-Catholic college and university is that instruction is given in them at a time when young men and women are beginning to think for themselves; and we know that if there be no religion at all, or if religion play a minor part, the instruction must be not only defective, but dangerous to the intellectual and spiritual life. It is not likely that men who graduate from non-Catholic colleges and universities will become ardent supporters of the parochial schools and the Catholic college. They may feel that individually they have suffered no loss of faith, no diminution of luster in their religious beliefs; but they fail to see the thousand and one others who have either lost faith altogether or have drifted into absolute indifference in religion. Where men receive their highest diploma will be the center around which their affections will turn. If, then, the parochial school act as a feeder to the non-Catholic school, it is highly probable that a large element of Catholics graduating from the high schools will find its way into non-Catholic colleges and universities, and thus our parochial school without its high school is apt to become a feeder to the non-Catholic college and university. It is idle to say that our Catholic colleges have their preparatory schools which continue the work of the parochial schools. These colleges are not to be found in every community, and convenience as well as expense has much to do in determining the place to which students may go.

You may ask, What is the solution of this difficulty? One solution is in the unification and coordination of the Catholic system of education, which links parochial school with high school and college and leads to the university, which holds the headship of the system. No one will question the wisdom of unification. It has always been a characteristic of the church. It is the watchword of the hour. It is seen in her government, her discipline, her doctrines, and her methods. Her unity has made her irresistible. The rods tied in the bundle can not be broken. Education unified, systematized, coordinated, makes the union which will have strength wherewith to battle successfully against false education. One strand needed to our cable is the high school. How the high-school system will be worked out is a question of serious consideration. We know that it is largely a question of finance, while there is also the question of principle as to the right to tax the people for education beyond the grammar grade. Face to face with conditions as they exist, the working out of the high-school problem is one that demands the careful attention of all who are interested in Catholic higher education. As to the college, between the upper millstone of the university and the lower millstone of the high school, it is important not to lose sight of the trend in public opinion as made by the state and non-Catholic universities upon the high-school movement. We can not brush the difficulties aside; we must face them like men and carefully consider them.

It will not be amiss to discuss briefly at this point the question of graduate work in college. Although the universities have given to it the proper place in the university proper, yet we know that there is a disposition to introduce it into college or have it done by college instructors. As an element in collegiate discussion it may be touched upon at this moment.

As to the graduate instruction, for which there is an ever increasing demand, as it seems to me, two answers offer themselves. One is in the willingness of Catholic colleges to undertake this instruction; the second, in their readiness to allow this work to be done by the university which is intended and equipped for the work. Looking at the first answer, it is wise to see how far this can be done and what it

costs to do it. It is not merely sufficient that there be willingness on the part of instructors to undertake this work. The adding of the name to the college catalogue does not make the graduate school. There must be preparation on the part of the instructors and equipment on the part of the school. Here again we face facts. Graduate work to-day is the accepted function of the university in the proper sense of the term. It demands scientifically trained men, who, by their scholarly attainments, are prepared to enter into the field of specialism and fit students to be specialists. It goes beyond mere specialism and enters the broad field of scholarship and produces scholars capable of adding to the knowledge of the world. It requires laboratories and libraries thoroughly equipped with the best and latest scientific apparatus. Competition is so keen that if we would enter into it we must be prepared to do the work as it is done by the universities liberally endowed. It costs millions to properly endow a modern university. I have carefully compiled a statement by which you may see what is spent in Harvard, Columbia, Johns Hopkins, Chicago, Cornell, and other leading universities, especially in the work of graduate studies. Just as the Catholic college has to compete with the non-Catholic college, so the Catholic graduate school must compete with the non-Catholic university or else withdraw altogether from the higher education. It is not a question here particularly of professional schools. It is a question of what is known as graduate work, and this affects in large part the future training of teachers for our collegiate work. It is unreasonable to expect graduate work from our college teachers. They are already overtaxed with their present work. No body of men in educational circles are more deserving of consideration and gratitude than the army of teachers who are engaged in maintaining our collegiate instruction, but anyone who studies carefully the relation between collegiate and graduate work, especially in the light of modern university requirements, will readily understand the necessity of special training as well as special fitness for graduate instruction. In specialization alone not a year, nor even three, added to college work can be expected to do the work. It is the effort toward original research; it is the real reaching out of the student in his own personal development in scholarship; it is the accuracy from concentration of thought, from contact with library and laboratory by which he adds something to the science to which his life is devoted. The teacher, the library, the laboratory are the elements that train the specialist, the scholar.

You can not transform the college into a university by the mere change of name; you can not do graduate work by the mere declaration of a catalogue. The State charter makes neither the college nor the university; it simply bestows upon teachers a corporate existence and the power to confer degrees. The character of the college and university is in teaching and equipment, in the ability to do what education demands of them. Its real character is to be tested by the scholars it produces. If we merely change our name and add graduate work to our college without at the same time being prepared to do the graduate work which graduate degrees call for, we will find ourselves at the end of this century as we find ourselves somewhat at present—imperfectly developed institutions sometimes not deserving to be colleges, yet by charter called universities. Catholics possessing the truth of life and commissioned to develop it in the minds and hearts of the people, we should be the most honest of men in doing the best of work in whatever department we invite people to enter.

What seems to me the practical solution, as also a practical conclusion, is that we recognize the fact that we can not with our present means maintain several schools equipped to do graduate work capable of competing with non-Catholic institutions. It is the duty of the colleges, out of loyalty to the system and with desire for the best results, to do their best to build up the university, which our Holy Father, in accordance with the wishes of our hierarchy, has constituted as the head of our educational structure and to which he wishes all schools and colleges affiliated. Listen to what Leo XIII said to the bishops of the United States March 7, 1889: "We exhort you all that you should take care to affiliate with your

university, your seminaries, colleges, and other Catholic institutions according to the plan suggested in the constitution in such manner as not to destroy their autonomy." That was Pope Leo's idea of unification. It behooves us to more thoroughly equip our colleges and perfect our instruction. The teacher makes the school. Let us feel that the first duty of the college is to be a thorough college, doing the best collegiate work, ready to stand side by side with its non-Catholic competitor, and showing in its graduates the result of a Catholic college system. Its duty is not to reach beyond that which it is competent to do well, and, consequently, it should be found encouraging that class of students who seek advanced education along graduate lines to go to the university for it. It has the right to expect that the university should be prepared to enter into competition in graduate work with the best universities in the land. Catholic generosity has built the university primarily for university work in every department of scholarship, and it can not succeed unless every part of the educational system be loyal to it.

What would be the result of this united effort? First, there would be a strengthening of the entire system, a perfection of our educational scheme, a culmination of the efforts of a century, which would make us absolutely independent in education. Second, there would come from the university to the colleges a body of well-prepared teachers, religious and lay, who, equipped in all that the best universities can give, will be the better prepared to reach excellent work in our collegiate instruction. They will also be loyal to all the elements that enter into the educational life of the church. Third, the scholarship thus developed will stand ready to defend the truth against any and all of its enemies and to meet error based on false science by truth supported by true science. Fourth, there will be the preparation of teachers for the university, that thus we may provide for the future and build up a body of Catholic scholars prepared to stand side by side with the leaders of intellectual thought throughout the country. Fifth, there will come a splendid toning up in Catholic educational ideals, which will be a safeguard of the faith and traditions of Christianity. The layman, the clergyman, and the religious teacher will thus make it possible for the Catholic Church in the United States to send out into the world scholars competent to take first place in the fields of literature, in science, in professional, and in business life. It will develop the scholarship which in God's own time will find itself in scientific and literary magazines protecting science and literature from error and showing to the people that the perfect intellectual development is in entire harmony with the doctrines and practices of the church.

You gentlemen, representatives of the collegiate system, hold the traditions of the hundred years' struggle in the educational life of the church in this country. It has been a tremendous struggle; it has attained marvelous successes. Upon you falls a far-reaching responsibility as you stand to-day looking back on the century that has closed and forward to the century that is opening. Shall our Catholic educational system succeed or fail; shall it obtain but the minimum of results; shall we be able to resist the oncoming tide of secularized instruction? The answer largely depends upon the work of this association. Every one of our colleges should feel that that responsibility falls upon it, for the work which education demands of it is as important as that demanded from any other part of the system. Loyalty not merely to our own ideals, to our personal success, but loyalty to the wider and more general principle of the educational life of the church demands that it mortise itself into the system; that it stand by every part of the system, so that the entire system may stand by it, and thus the unification which results will give us the strongest resistance to the dangers which threaten us. Every college should feel that it exists not merely for the students, few or many, that pass through its halls, but for the schools below it, as also for the university above it, the university existing for it as well as for the whole system. * * *

CATHOLIC SECONDARY SCHOOLS.¹

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Among the striking phenomena in the educational world at the present time is the movement observable in the domain of secondary education.² The mere numerical growth of the secondary schools is remarkable enough. Within the past decade the public high schools in the United States increased in number from 2,526 to 5,495, and the pupils from 202,963 to 476,227. This is an increase of 117 per cent in the number of schools and 135 per cent in attendance. The rate of increase in the number of pupils is nearly five times that of the population of the country during the same period, and is rightly regarded by Commissioner Harris as "one of the most remarkable facts in the educational history of the decade."³

But this numerical increase is only one of a series of phenomena which evidence the action of a cause or of causes profoundly affecting the whole status of secondary education. Side by side with the growth in numbers there has been a movement making for the increased efficiency of the public high schools. The standard of scholarship in the teachers has steadily risen. The curriculum has been enriched and extended. In most places its length is now four years, but here and there it is being prolonged to six, and the strong current setting in this direction is made plain by the adoption of a resolution recently by the National Educational Association favoring "a unified six-year high-school course of study, beginning with the seventh grade."⁴ At the same time the ideals and spirit of the school have broadened, the principle of election of studies along broad lines has been introduced, and the requirements for entrance and graduation have been so raised that the claim is made that the public high school of to-day is almost the equal in these respects of the college of a generation or two ago.

The relation of the high school to the college has also undergone an important change. The original purpose of the public high school seems to have been simply to place within reach of the masses the opportunity for an education superior to that of the elementary school. The college interests were not considered. In fact, at the time the high-school movement began, in the second quarter of the nineteenth century, there already existed a system of secondary schools known as academies, one of whose principal objects was to prepare boys for college. To-day the public high-school system, comprising 82 per cent of the secondary students of the country, is securely linked to the State college system, and the natural evolution of the present conditions can only result in binding the two together more firmly.

Among the causes which have operated to bring about this affiliation, legislation must be mentioned. The board of regents in New York and the boards of education in the various States afford familiar instances of the influence of legislation in this direction. The accrediting system, by which the graduates of certain specified schools are admitted to a college without examination, has also contributed powerfully to the same result, and it is being practiced to-day by some institutions on a scale that may help to account for their rapid increase in attendance. In 1896 there were 42 State universities and colleges and about 150 other

¹ This paper is given as reprinted, in amplified form, in the *American Catholic Quarterly Review*, July, 1901.

² The term "secondary" throughout this paper is used in the sense which generally attaches to it in this country, and in which it is used by the national Bureau of Education. It embraces the work between the grammar grades and the college.

³ Report of the Commissioner of Education for 1898-99, p. 1844.

⁴ Proceedings of the National Educational Association, 1899, p. 659.

institutions in which this system has been adopted.¹ The University of Michigan has now 200 on its list of formally accredited schools, and more than one-half the freshmen who entered Cornell last year were admitted without examination on the certificates of their respective high schools.² Another strong influence which has made for closer union between high school and college has been their cooperation in joint associations. There is the National Educational Association, the associations for the several groups of States, besides those for the individual States, and in all of these bodies the schools and colleges meet upon common ground, discuss matters of mutual interest, and cooperate for the solution of problems common to both school and college, but which from their very nature neither can successfully solve alone. Such a problem is that of uniform entrance requirements for colleges. A plan has been formed to establish a joint entrance examination board, composed of school and college representatives, which is to give uniform examinations that will suffice for both high-school graduation and admission to college, and it is now being put to a practical test by the Association of Colleges and Preparatory Schools of the Middle States and Maryland. This is an attempt to complete, at a single stroke, the work of unification, and if successful it is likely to have important consequences. Catholic educators may watch the experiment with profit.

"Public education," a distinguished Catholic educator has said, "is a people's deliberate effort to form a nobler race of men." The position of the secondary school, between the primary and the higher education, makes it naturally the chief point of stress for the application of this progressive educative effort. The secondary school is the hinge upon which the modern educational system turns. In Germany the new ideals in education, springing from the new industrial and political conditions and the new ideals of national life, have found expression chiefly in the present movement for the reform of the gymnasium; and in France, outside of the religious question altogether, as well as in other nations of Europe, the burning questions of the day in education concern the secondary schools. In America the secondary school is more important than anywhere else. From its academic independence it is able to influence powerfully the higher education; while, through its organic relation to the primary school, it is able to reach the masses and mold their intellectual ideals. In America, as nowhere else, the public secondary school opens up to the whole people, irrespective of social conditions, the possibility of fullest mental development. It brings the rudiments of the higher culture to the threshold of every home, and offers to every child a free and easy passage to the open gates of the college. It is preeminently "the people's college." It can not be doubted, therefore, that the public high-school movement, whose surface manifestations I have touched upon, is the expression of a popular demand for more and better education, and that it is destined to exercise a profound and far-reaching influence in shaping the education of the future.

In view of these conditions it seems opportune to inquire into the status of Catholic secondary education.

Catholic secondary schools for boys belong to three widely different classes. There is, first of all, the secondary school proper, represented by academies and high schools, whose curriculum as a rule extends no farther than the freshman year, although in the other direction it generally includes the studies of the grammar school. Many of the institutions of this class are of long standing, but a large number are of a comparatively recent date, probably one-third having been established within the past decade. Most of them are conducted by religious orders, and are entirely independent of parish control, deriving their means of support from the tuition fees of their pupils. Then, there are the high schools attached to

¹ Education in the United States, Vol. I, p. 125.

² President Schurman's Report, 1899-1900.

parochial schools. These high schools consist of one or more grades of secondary work, serving as a sort of appendix to the ordinary work of the school, although they often carry the pupil as far as the freshman year. The number of these schools has increased very rapidly of late, and although their total attendance is comparatively inconsiderable and their methods often open to criticism, yet, as instancing an increasing popular demand for secondary education, and as pointing the way to a possible solution of problems of Catholic secondary education, they are worthy of serious study. Finally, there are the preparatory departments of our colleges, which still contain the majority of Catholic secondary students.

With the view of ascertaining some facts not otherwise attainable, I sent a letter of inquiry to each of the 90 secondary schools of the first class and received replies from 49. In these 49 schools the number of students of high-school grade was given as 2,947, and of elementary grade 4,917. There were 992 boys studying Latin, and 244 in Greek. The average age of pupils in 47 schools when entering the high-school curriculum is 14.7 years. The average annual tuition fee, if we exclude those schools that aim at educating only the wealthier classes, was found to be \$36.85 in 40 schools. The number of schools not answering my letter of inquiry was 41. The total number of students in these last year, as given in the Catholic Directory for 1901, was 6,706. Assuming that the ratio of secondary to elementary pupils obtained in the case of the schools heard from holds good for these also—although I think it is somewhat too high for the latter—we get for these 41 schools 2,513 pupils of secondary grade and 4,193 of elementary. This would give a total of 5,460 students of secondary grade in the 90 Catholic secondary schools.

In reflecting on these results, one is struck by the comparatively large number of pupils pursuing the classics. Those studying Greek constitute 8.3 per cent of the whole number of secondary pupils in the schools reporting. The percentage of pupils in the public high schools studying Greek is only 3.1.¹ Those studying Latin are 37.5 per cent of the whole, a number which compares favorably with the 50.4 per cent in Latin in the public high schools, when we remember that some of the religious orders most prominent in secondary school work do not teach the classics at all, and the further fact that in the 25 schools reporting pupils in Latin their percentage was as high as 66.5.

The average age of entrance upon secondary studies is much higher than I had expected. It is quite as high as in the case of the public schools, and invites serious attention to the need of shortening and enriching the curriculum of the elementary school—a problem that far-seeing educators like President Eliot long ago pointed out as of fundamental importance to college as well as school.

It is interesting to compare the cost of secondary education in Catholic and in public secondary schools. The Commissioner of Education has kindly furnished me with some statistics relative to the cost of public high-school education, from which it appears that the average annual cost per pupil for salaries and incidentals in 10 of the principal cities of the country is \$52.44. The average annual tuition fee in 40 Catholic secondary schools is, as stated, about \$37. As the only source of revenue to these schools is the tuition fees, it is safe to say that secondary education in the Catholic school costs considerably less than in the public high school.

So far as the efficiency of Catholic secondary schools of this class is concerned, such examination as I have been able to make has convinced me that they will fairly bear comparison with the preparatory schools in our colleges. There are exceptions, it is true. There are secondary schools graduation from which would not fit for the freshman year in any reputable college, just as there are colleges whose preparatory curriculum is inferior to that of any reputable high school.

¹ Report of the Commissioner of Education, 1898-99, p. 1846.

But in general, making due allowance for the fact that many of our secondary schools are commercial in character, I believe that our college preparatory departments have little to offer the Catholic boy in the way of educational facilities beyond what he can get, often nearer home and at lesser cost, in the Catholic secondary school.

Catholic high schools attached to elementary schools are represented in the current Report of the Commissioner of Education by 53 schools, with an attendance of 646 boys and 1,342 girls. This is an average of 12 boys to a school. These schools are mostly in the hands of the various orders of teaching nuns, and are nearly all coeducational. Most of them offer four grades or years of high school work, although the average number of teachers to a school is only three. It is worthy of note that the pupils preparing for college in these high schools formed 9.6 per cent of the whole. In the public high schools those preparing for college form 11.6 per cent of the whole.¹ The comparatively large number preparing for college in Catholic secondary schools of this class is a fact of highest interest for college men, and suggests what might be expected in the way of increased college attendance, if we had a comprehensive, efficient, and well-articulated system of parochial high schools.

The list of Catholic secondary schools of this class, given in the Report of the Commissioner of Education is, however, far from being exhaustive. Scattered over the country are hundreds of other parochial schools in which one or more grades of high school studies are taught, the general disposition being to keep the pupils, especially the brighter ones, as long as possible. The total of attendance, however, is not large. Thus in the archdiocese of Boston there are a number of schools of this class not enumerated above, but the total of secondary pupils amounts, in the case of boys, to but 108. It is no uncommon thing to find a school of several hundred pupils with half a dozen or so of secondary grade, who stand in about the same relation to the rest of the school as do the "post-grads" in a small college, and who pursue their studies in much the same loose and leisurely way. Sometimes a number of these inchoate high schools are found in the same city, and we have the condition of a series of ill-supported rival establishments where not more than a single one is needed or can be successful. In such cases, so far from the high schools being a source of strength to the parochial schools, as they could not fail to be if combined in one central, well-graded institution, they become only an element of weakness and a drag, because the teaching they get, scant and feeble as it may be, has to be subtracted from that which is due the elementary grades. There is an enormous waste of energy going on in this way in our schools. Nevertheless, the attempt to project the parochial school beyond what has been hitherto regarded as its proper limits seems to be in answer to a popular demand, and is doubtless destined to continue. The movement is bright with possibilities, for the secondary schools of this class, however unsatisfactory and open to criticism they may be in some respects at present, constitute a firm forward step in the work of bridging over the gap that now separates Catholic higher education from the parochial schools.

In estimating the number of collegiate and secondary students in Catholic colleges I have classed as colleges all institutions recognized as such by the Commissioner of Education, and have added such others as I could ascertain to have an actual collegiate attendance. This gave a list of 68 Catholic colleges. The total number of students in these, as given in the current Catholic directory, is 12,031. If we take the estimate of Dr. O'Malley,² made in 1898, and based on direct investigation, that the proportion of preparatory to collegiate students in our colleges is as two to one, then the number of collegiate students in the 68 Catholic colleges

¹ Report of the Commissioner of Education for 1898-99, p. 1846.

² Catholic World, 50, 399.

ter of the classics, for instance. Only a little over 3 per cent of the public secondary pupils study Greek. It is one of the most unpopular branches in the high school. Yet many of our colleges will not admit to the freshman class without Greek. The practical consequence is that whereas the high-school graduate who has not taken Greek is welcomed to the State university, he may not be able to enter the freshman class in the Catholic college without extra preparation or irksome conditions. On the other hand, the path from the public school to the State university is short, straight, and enticingly easy. The high-school diploma often admits without examination. The last year of the high school is made to dovetail into the freshman curriculum. There is no gap, no break, no jar of any kind. It is an interlocking, double-action combination. The lack of endowment in our colleges is, of course, an element of importance here. The foundation of scholarships would unquestionably operate in favor of increased attendance; but it may reasonably be questioned, I think, whether, even if our colleges were not behind-hand in this respect, the fact would be sufficient to offset the strong current now flowing in the other direction, since Catholic boys would have equally good chances for financial assistance in the non-Catholic institutions.

If, on the other hand, we accept the hypothesis that the falling off of the attendance in Catholic institutions is due, in whole or in part, to the fact that Catholic youth, owing to the general poverty of our people, do not get as much education as the children of their fellow-citizens, the argument for the Catholic high school rests on reasons none the less cogent. The poverty of the majority of Catholics is a fact not to be gainsaid. It undoubtedly diminishes their opportunities for education, and is certainly responsible, to some extent, for the comparatively low attendance at Catholic institutions. But since the church discountenances the acceptance by her children of the lavish opportunities for education offered them by the State, are we not bound to provide for them opportunities not inferior to those provided in the public schools? In a democracy like ours and in times of universal education such as these, education is, ordinarily speaking, the measure of influence and success. To be without it is to be to that extent crippled for the race of life. To be deprived of opportunity for it is to be robbed of that which is, after religion, best and most ennobling in life. Surely we can not look without concern upon conditions by which any class of the church's children are deprived of educational opportunities to which they are entitled. Yet such conditions obtain. Taught to distrust the public schools, Catholic parents, in the absence of Catholic high schools, too often come to look upon the completion of the parochial school curriculum as the natural term of the mental development of the child.

The preparatory departments of our colleges are not a satisfactory substitute for a system of Catholic high schools. Purely from the point of view of college interests, much might be said against the continued union of preparatory school and college, for it may be questioned, I think, whether collegiate attendance depends so much as is commonly supposed upon the presence of preparatory departments in the colleges. A record of observation, telling how many third-year preparatory boys in any given college kept on through the college course to graduation, would be highly interesting and instructive. However, I am concerned now, not with the relations of preparatory school and college, but simply to state the reasons for my contention that our preparatory departments are not acceptable substitutes for Catholic high schools in the case of pupils who do not intend to go to college—and it is pupils of this class that constitute nine-tenths of all secondary students. Besides the fact that the day colleges are neither numerous nor well distributed enough, the distance between the parochial school and the college is too great. The absolutely private character of our colleges, so far as management is concerned, seems to make anything like close affiliation with the parochial school system a difficult if not an impossible matter. Moreover, the curriculum of the

preparatory school looks chiefly, if not solely, to the interests of boys who are fitting themselves for college. In many colleges no attempt whatever is made to reach out after the great mass of boys of secondary grade, by providing courses of study that shall offer opportunities to fit more directly for active life. But the chief reason that militates against the preparatory departments is the fact of expense. Education can not be given as cheaply, grade for grade, in the college as it can in the secondary school. The average annual tuition fee of \$37 in 40 of our secondary schools, including many of the strongest schools of this class, is far less than the average annual tuition fee for day scholars in the preparatory departments of our colleges; and it is to be noted that the tendency in many colleges is steadily toward the increase of tuition and other fees. I am aware that some colleges in the larger cities have reduced their rates to a comparatively low figure and are making heroic sacrifices in order to give the children of the poor a chance; but, speaking generally, the cost of tuition and its inseparable accompaniments in college preparatory departments puts it entirely beyond the reach of many parents who could and would send their children to a free or cheap Catholic high school. How many there are who are prevented in this way from giving their children an education superior to that of the parochial school may be a matter for dispute; but it is worth remembering that an investigation made some years ago in the case of the public high school pupils in a number of the principal cities of Massachusetts revealed the fact that fully 25 per cent were children of parents who were too poor to possess taxable property.¹

Parochial schools, even more than the colleges, will benefit by the establishment of a system of Catholic high schools. "Progress," says Bishop Spalding, "spreads from the summits." The greatest need of the parochial school at the present time is the stimulus that would come from affiliation with a superior school. The impetus given to parochial school education by the third plenary council of Baltimore has largely subsided, and there is evident in many quarters a growing spirit of indifference. The number of pupils, which increased very rapidly in the decade immediately following the promulgation of the decrees of the council, is still less than one-half of the normal, and in the last half dozen years, as the tables of the Catholic Directory prove, the increase in parochial-school attendance has not kept pace with the increase of the Catholic population.

Nor have the expected results followed from the general adoption of the elaborate scheme of examination and supervision devised by the council. The practical difficulties in the way of the efficient enforcement of the plan are immense, and although a great deal of progress has been made in some dioceses, in many others things run on much the same as before the examining boards and committees were appointed. In many places the parochial schools are still deplorably in need of definite and regular grading. There is much confusion in the matter of text-books, preventing any approach to a common standard of grades. Many of the religious orders have their own series of text-books, and in the larger cities, where the religious orders often work side by side, the variety of text-books is a frequent source of trouble and expense. The influence of a Catholic high school, with which all the parochial schools of a city would be affiliated, would tend to eliminate these and similar defects. It would set the standard of a definite quantity and quality of work, and school grading and substantial uniformity in grades and text-books would follow as a matter of course. Above all, the Catholic high school would benefit the parochial school by strengthening and elevating its tone, by awakening a sense of healthful ambition and rivalry in both pupil and teacher. Experienced parochial school-teachers with whom I have discussed the matter assure me that it is this lack of tone, due to the absence of conditions that inspire intellectual ambition, that constitutes the most deadening and difficult evil they have to contend against. A boy who is ambitious to go to the high school will do

¹ Educational Review, 2, 48.

better work, as a rule, than one who is not, and parochial school-teachers would find in the establishment of Catholic high schools a most effective remedy for the pupil's disinclination to home study. The annual entrance examination for the high school would become a test of the strength and competitive standing of the various schools, and would spur the teachers on to the best possible work in their respective spheres. These convictions, I may add, are not based upon fancy or speculation, but are the result of a careful study of the influence of Catholic high schools actually existing, and of the views of those most competent to discuss parochial school conditions and problems the country over.

I have said nothing thus far about practical plans for overcoming the difficulties in the way of the establishment of Catholic high schools. The difficulties are certainly not slight, but the chief difficulty does not consist in any lack of practical plans. There are several admirable plans in successful operation that may be studied in the concrete by anyone. There is the plan of the free, endowed high school, such as the magnificent Catholic High School in Philadelphia; there is the free high school supported by the funds of the parish or parishes, as in New England; there is the high school supported by the tuition fees of the pupils, and in charge of a religious order. There are plenty of religious men and women for the work of Catholic secondary schools, and with the inevitable evacuation of the field of the parochial school by religious men these ought to be available in increasing numbers for their greater, more pressing, and more proper work in the secondary school.

The main obstacle in the way of the Catholic high-school movement lies deeper than the question of means. It is due rather to widespread lack of faith in the utility and desirability of Catholic high schools, and it is not confined to the laity. Pastors who are zealous enough in the cause of the parochial school disavow belief in the necessity or possibility of Catholic high schools, and permit without scruple the attendance of Catholic children at the public high school. Men in the walks of higher education look with coldness or disfavor upon the project of a system of Catholic high schools, out of the fear that they might injure existing institutions. The result is apathy and indifference well-nigh universal.

And yet what sound reason can be given, outside of the reason of necessity, why the Catholic parent should be freely allowed to send his child to the public school in the one case and strictly forbidden in the other? Is there less need of the religious instruction and moral tone of the Catholic school for the boy of 16 than for the lad of 12? Are the dangers of companionship less great in the public high school than they are in the grammar school? Does the subject-matter of the lessons or lectures bear less upon matters of morals and religion? As a matter of fact, it is in the high school that the boy gets his first world view of things. Literature and history are the two eyes through which the soul scans the universe of human life. Is it tolerable that the view may be distorted or colored for the Catholic boy by non-Catholic bias? If history and literature may be studied in the public school without danger to faith, why may not, with greater reason, grammar and arithmetic? If the boy of 16, with his ripening passions and impressionable moral nature, may live in a "godless" atmosphere without harm, why may not the boy of 12, with his less-developed impulses to evil? And the same argument would apply with no less truth and cogency to the question of higher education. There is really no more reason to prevent a Catholic boy from going to a non-Catholic college than there is to prevent his going to a public high school. The logical applicability to parochial school and college of any general principle that may be admitted for the secondary schools is too plain to be missed by even the most ignorant, and the present widespread attitude of indifference in respect to Catholic high schools must, if continued, extend eventually to the parochial schools and the colleges, and profoundly affect the entire system of Catholic education.

It is because of the realization of this that our ecclesiastical councils, in con-

formity with the instructions of the Holy See, have insisted so strongly and steadfastly upon the necessity for a complete system of Catholic schools, along the lines of the national education, and that our ablest and most far-seeing leaders are devoting so much of their practical efforts in education to the building up of Catholic secondary schools in their respective dioceses. The vast expansion of public secondary schools in recent years, the rapid educational evolution going on visibly about us, with the possibility of the complete unification of all public education, makes the question of Catholic high schools, with which that of the systematization of Catholic education is intimately bound up, a vital and a pressing problem for Catholics. It commends itself especially to the attention and earnest study of Catholic educators. The present conditions are abnormal and illogical, and in the nature of things must operate to the detriment of the religious as well as the educational interests of our people. In the words of one whose abilities and experience entitle him to rank as an authority: "There is far less danger in allowing young children to attend the ward schools and young men to attend the non-Catholic technical schools and universities than in permitting the frequentation of the non-Catholic high schools and academies. We believe it would be better to frankly accept the public-school system as a whole and make special provisions for supplying its deficiencies in religious teaching than to expose our children to the influence of a dual system."¹

DISCUSSION.

In discussing this paper Dr. Carroll, of Dubuque, said that in the diocese of Dubuque widespread interest was being taken in the high-school movement, the pastors of the city zealously cooperating with Archbishop Keane in his efforts to build and maintain a Catholic high school.

Monsignor Conaty remarked that in Providence a meeting of laymen and clergy was lately held for the purpose of establishing a Catholic high school in that city.

Rev. M. P. Dowling, S. J., of Omaha, said that he doubted whether we had any power to establish Catholic high schools. All we can do, he said, is to encourage pastors and prelates to establish these schools. He was convinced that apathy existed not only in regard to Catholic high schools, but also to an extent in regard to all Catholic education. Moreover, as a practical question, in small cities where a college already existed a Catholic high school would not only be unnecessary, but decidedly detrimental to the academic department of the college. He would also put in a disclaimer against the addition of one or two inefficient high-school grades to the ordinary parochial schools, as experience showed that these classes were generally only makeshifts.

Rev. James P. Fagan, S. J., of Washington, replied that the same difficulties now urged against Catholic high schools had formerly been urged against all high schools. In his opinion Catholic high schools should be maintained where local conditions demanded them, and not in other places.

Father Fagan also objected to several current maxims as calculated to give false impressions. The expression sometimes used of "uplifting Catholic education" was calculated to convey the idea that Catholic education was not as good as other kinds of education, which in his opinion was decidedly not the case. "To shorten and enrich elementary courses" was to his mind another catch phrase which was self-contradictory, to enrich a course meaning to multiply the studies, which was certainly incompatible with abbreviating the time for seeing these studies. "Fitting pupils directly for life" was a modern coinage which seemed to imply that the older and approved systems of education had failed to fit students for life.

The following letter was read from Cardinal-elect Martinelli, apostolic delegate:

APOSTOLIC DELEGATION, UNITED STATES OF AMERICA,

Washington, D. C., April 23, 1901.

Rt. Rev. THOMAS J. CONATY, D. D.,

Rector Catholic University of America,

Chairman of the Association of Catholic Colleges:

RT. REV. DEAR SIR: * * * The educational work done by Catholics up to the present time is deserving of great praise. Wonders have been wrought in the

¹ Rev. John T. Murphy, C. Sp. S., in *American Catholic Quarterly Review*, 22, 461.

face of difficulties which have been by no means light. That so much has been done is the chief reason why more ought to be attempted. To achieve still greater results what would seem to be needed is precisely what your association aims to do. Unification and coordination of educational work, so that a complete and perfect system shall exist, based on the strong and broad foundation of good parochial schools, the superstructure consisting of well graded and highly perfected academies, colleges, seminaries, and undergraduate universities, all culminating in the institution, the foundation of which our holy father counts as one of the glories of his pontificate, are, it would seem to me, the things most to be desired at present to enable the Catholic efforts to cope successfully with those being made by secular or sectarian forces. It is only by such coordination that the desired elevation in standard can be brought about. The time should be hastened when an academic degree conferred by a Catholic institution in this country shall be equal in all respects to one conferred by any other, and when this equality shall be recognized by all. We live in times when natural values are appreciated first. Catholic education, it is true, offers first and as most important, supernatural value. This it must and shall always continue to do. But there is no reason why it should not offer at the same time a natural value equal to and surpassing that which non-Catholic education can possibly hope to offer. Let Catholic educators, then, unite their strength, and it will not be long before we shall have a system in this country which will give to our young men results which they can find nowhere else—diplomas and degrees which are equal and superior in value to those obtained in the same grades of other institutions, up to university degrees which no other institution could dream of presenting. * * *

With sentiments of highest esteem and fraternal charity, I remain,

Yours fraternally in Christ,

SEBASTIAN, ABP. OF EPHEBUS,
Apostolic Delegate.

THE TEACHING OF SCIENCE.

By REV. HENRY J. DE LAAK, S. J.,

Professor of Physics in the St. Louis University, St. Louis, Mo.

To a school man of a hundred years ago a modern college would in all probability be an unfamiliar institution. It might surprise him that his own favorite studies were all but crowded out of the curriculum as discredited and a multiplicity of subjects never heard of by him introduced in their stead. Though he might soon discover that the new structure was largely built upon utilitarian foundation, and that education was largely estimated as a commercial asset, he would also concede the existence of a remarkable intellectual activity, stimulated by the new world-power, Science.

Were he now to find himself in the position of a twentieth century college president his own education would prompt him to reckon with the new factor, for he would perceive that a youth's education must adapt him to the age in which he lives. Centuries differ, and markedly so. Consequently no course of studies is final. The purpose of education is always the same. The means may vary. There is rise and fall in educational matters as there is elevation and subsidence in the earth's strata. The story of the human mind is a history of oscillations. We must take the pendulum in the phase in which we find it. It is the scientific phase now.

The purpose of an education is attained when by its means a young man's faculties are awakened and made available to him to their full extent. Theoretically it may not matter how this is done. But the method and means taken should not

launch him into an unfamiliar world. In past ages the schools kept in view the civil life of the age, while at the same time they considered themselves recruiting offices for the university. The curriculum was shaped as much as possible to give an available education. The same reasons for shaping a course hold now, and perhaps more strongly. It is obvious that availability is more operative to-day than ever, and if science is therefore found qualified as a sound educating factor it can not to-day be excluded from the college. This is not the strongest reason. Science dominates more than the industries—a point which shall be referred to later.

It is hardly the question whether science is to be excluded from a college course or not, but rather its limits in the course, what specific subjects should be taught, when, how much time should be given, what should be the manner of teaching.

These questions were not assumed in a day at any time in the history of education concerning any branch of study, and it is not to be expected that anything but experience can give the answer in this matter.

If there were no difficulty or obscurity, opinions would not be so divided as they are on all the issues mentioned. Outside of extreme views, however, sufficient convergence exists. It is conceded that the old classics are true educators, and also that the claim of science to such distinction can not be overlooked. Inspection of the many catalogues of secondary schools and colleges shows, however, the greatest divergence concerning the practical questions alluded to. Such an unsettled condition proves the existence of an uncertainty as to the best evaluation of science education, and is therefore unsatisfactory. It is a more or less necessary condition, however, and one which, it seems, tends actually to the solution of the problem. Educational institutions, we may believe, keep a conscious, or at least subconscious, watch upon one another and note the success or failure of a given curriculum in order to profit thereby. In one sense, therefore, the more divergence there is the sooner will the fittest survive. The eliminating and constructive process seems thus far to show that the classics will not be much curtailed. Their educational importance is to-day recognized even more than it was ten years ago. The Gordian knot of the course is, then, how to accommodate science in addition.

The student's capacity is to-day about the same as it always was. The student whom our pedagogue of yore had in hand was as heavily taxed as his modern successor—who is not known to be more studious. Nevertheless, it would seem as if the latter had a right to protest against being "run under overload." This will assuredly be the student's lot unless the course be arranged with prudence and forethought. The college is here battling with a difficulty; if it is to educate, then science must be taken seriously and a reasonable time be given to it, or it had better be let alone. It is impracticable to greatly extend the course. The age is too impatient—boys would not be graduated; perhaps not enter at all. On the other hand, if for the sake of old-time thoroughness in the humanities, an institution should exclude science, its roll call would certainly be answered by an ever-decreasing number of students. But a "struggle for existence" motive is a poor one to determine the opening of the doors to science. A college will not really accomplish anything in that department if within the inner circle of the faculty science is looked upon as a sop to Cerberus. But it is no better to convert a college into a technical or science school in order to appear up to date in modern educational movements. There must be a golden mean somewhere, and our colleges must be given time to find it. "*Die Zeit ist kurz—die Kunst ist lang!*" and a much older adage advises circumspection when the occasion would urge hurry.

But for the strain put upon the old course with the advent of science, it is unlikely that elective or alternative courses of study would be seriously discussed. An elective arrangement suggests early specializing, the direction of which is to be determined by certain capacities and tastes of the pupil. It has not been shown who is to discover the latter's specialty. To say it is the young scholar himself would attach singularly great importance to uneducated

and inexperienced judgment. At the same time, the teacher can not be supposed to possess intuition, and has not the data for deduction. That the boy betrays strong inclination and readiness in some direction does not constitute an infallible diagnosis of his case, though the symptom is well worth noting and keeping in mind. Such manifestations, however, are not nearly as common occurrences as theorists would be glad to believe. Nearly all boys, moreover, betray varying tastes within a six or eight years' course; that is, if they betray any at all, and do not reserve their whole enthusiasm for athletics, for example. This is particularly true of scientific tastes; literary tastes seem to be less fugitive. Many science teachers can, I dare say, be found who remember scientific prodigies of 16; one designing a creditable dynamo machine, another contriving chemical experiments, and a third quite expert in classifying natural history objects. Spontaneous evaporation within a few years' time finished the history of the youthful talent.

Furthermore, it does not appear to be true that a boy as heavily charged with science as an electric system can compass, has, for that reason, better prospects for an opening when he leaves college except it be a chance opportunity. The ranks of science are as crowded as those of any other profession. Should an institution advertise for a science teacher, or an establishment for any talent of that kind, it would be answered quickly; possibly by a number of applicants, and by men of first-class attainments. Even if there were not this difficulty, scientific specializing as made possible by elective courses did not benefit a boy greatly. It is certain that he will not meet college laboratory conditions in actual life, and can not possibly have enough technical knowledge to command the consideration that could legitimately be expected by the university specialist. He has, therefore, to serve his time in an enterprise wherein his science is applied, as well as his rival from the regular course, or drop its pursuit. Generally the latter happens. In either case, given equal ability and opportunity, his rival has good chances to pass him on the road, and, in fact, will probably do so. If statements now and then appearing in professional and technical journals are adverted to, it will be found that managers of large corporations applied to for an engagement are likely to inquire concerning a diploma or certificate to show appreciation of the regular "classical course" document. Experience has shown them the alertness of such applicants, and the absence of conceit based upon their "science," though they are not unfamiliar with its elements.

As an instance, I may cite an inaugural address delivered by Sir Andrew Noble (October 3, 1899) before the faculty, students, and patrons of a purely technical college. "The best education for engineers," was his subject. "You can form but little idea," said he, "of the number of persons of both sexes who have assured me that their sons had no taste for books, but had shown a marvelous talent for engineering. I need not tell you that the marvelous talent generally turns out to be an incapacity—probably from defective education—for seriously applying the mind." He adds: "One of the great abuses I take to be that technical education is often begun too early in life; that is, that it is substituted for a general education, and a boy attempts to put his knowledge to practical use before he has learned how to learn."

Sir Andrew Noble is at the head of an army of not less than 30,000 men, representing the late Lord Armstrong's industry centering about Elswick, England. As a preparation for Elswick he recommended: "Send the lad to the best school you can, keep him there as long as you can; do not curtail his time, and do not stunt his growth by narrowing him down to any special study. My own impression is that, as a sharpener of young intellect, it would be difficult to improve the curriculum which, in the main, has been in force for so many centuries." He declares his disapproval of science in primary schools, and goes on to say that, as far as efficient education was concerned, such things as "engineering shops" or "laboratories" in secondary schools, and their equivalents, for older

boys, were a failure and a loss of time in hours better devoted to more valuable study; though he was ready to credit them with "offering reasonable diversion for recreation." "Nor am I," he continues, "in accord with those who think that modern languages should supersede the classics as a means of education, and I should regret more than I do the attempts made in this direction did I think these attempts would be likely to be successful." Candidates from the time-honored curriculum he considers easily picked out in a crowd of applicants, and he refers to them in the words: "Speaking as an employer of labor, I should say that we find in them a pleasant speech and manner, tact in dealing with others, and some power of organization." He finds a freshness in such young men absent in the school specializing scientist who has become "half stale with too much technical school work." It is to be noted that Sir Andrew Noble spoke, not as a professional educator, but as a business man, who has had an almost unparalleled opportunity for noting the influence of various educational schemes upon thousands of young men.

Contrary opinions to this come usually with most outspoken definiteness from teachers; of course, science teachers. Not a few claim practically the whole field for science, or, at least, for "scientific methods." It is particularly their science that is of commanding importance. The smallest boy must make physical measurements. Time for it must be lopped off from subjects not science; necessarily, of course, for these scientific methods require time. Laboratory work is slow. Hence more hours must be given to science, and small classes are essential. Consequently a large staff of teachers is required and comprehensive equipment. Hence criticism of the too "literary" headmaster, president, or prefect of studies, who does not understand science and therefore neither the "requirements of modern education."

So it comes to pass that the boy is a bone of contention to those who would educate him. The boy survives it very well; he does not borrow trouble from that source. Theories and text-books are in high flood for his benefit—most of them "scientific." Their purpose is to peptonize science for him, and, for that matter, peptonize it for his teacher also. That the campaign is urged with vigor and varying success is evident from the great difference in requirements made nowadays by colleges. While in few science has almost no foothold, others are adding laboratories and workshops on all scales and multiplying the subjects offered in alternative or elective courses. This is evidently experimental.

There does not appear to be an imperative need to dislocate or dismember, much less to cast aside, the old curriculum to make room for science. No serious inroads upon the course have been made in colleges conducted under old traditions. Some have added a year; others have contracted the classics somewhat. There seems to be an uneasiness, however, about the years and hours per year allotted to science; the occasional shifting about of science instruction shows this. But, on the whole, our colleges can hardly be reproached with being niggardly. One-quarter of the class hours for a minimum of two years can not be called a small percentage. A further two hours a week in a third—the graduating year is usual—and if it be remembered that the mathematics can be made directly to support at least physics and astronomy, 10 per cent of the whole school course can easily be shown to be the share allotted to science. Some colleges are trying the experiment of increasing this by the introduction of natural history into the lower classes. This, however, will probably not be indulged in largely; for, though it is true that the child may thus be put temporarily into the possession of many facts, it is a question whether the time had not better be given to pursuing fewer subjects—the old ones—with more vigor. A child's knowledge can be so dissipated into heterogeneous fragments that it no longer represents an education. Education seeks to produce ability—"Können" more than "Wissen."

If it becomes necessary for a college graduate to look into one of the subjects

covered by the general term "science," he should certainly find no great difficulty in becoming familiar with it, with the ability which we have a right to suppose he has acquired. His ability will probably be the better for it, if in his early years he has not formally studied botany, zoology, physiology, biology, as class matter. Moreover, it is plainly improbable, that he will find any more direct use for these than for his classical knowledge, and just as probable, on the other hand, that he will promptly forget all he knew and therewith lose what these hours were worth.

This does not mean that no benefit can be derived from science in all the years of the course. The teacher ignorant of all science, in any properly so-called college class, is an anachronism. Besides knowing what is formally his subject, he should not be devoid of erudition. The teacher of to-day must know something of the natural sciences—the more the better—and that, if for no other reason, in order to teach his own subject effectively. He can find illustrations and analogies in endless variety in the fields of science. He will not only interest his scholars, but expand their horizon. Their estimate of him will rise when he shows grasp of many subjects.

This point need not be pursued further. It is too well known that Catholic educators and educating bodies have always sought erudition in teachers. But it may not have been encouraged as much as it deserves in the scientific direction. Scientific knowledge is a real educational lever in any teacher's hands, if he knows how to make use of it. Young boys instinctively appreciate science. Teachers to whom natural history is not unfamiliar should find in grammar and preparatory classes, even, fair fields to cultivate with the help of science. Geography alone, for example, suggests meteorology, zoology, botany, ethnology. Digressions into these can be made to excellent purpose without making it necessary to burden the pupil's recitations and examinations. The formal, printed "course of studies," whilst it does not take cognizance of this kind of science teaching, and in consequence looks scant and jejune, does not therefore prohibit it. On the contrary, it may be said to suppose the same by taking a good teacher for granted.

When the time arrives to exercise the young mind in science the teaching must be more formal. It is clearly not best to look for this training in subjects that are largely classification of phenomena—full of nebular hypotheses, uncertainties, speculations, subject to cataclysms, and wholly depending upon other sciences. The proper sciences are those that coordinate facts, possess a logically constructed edifice, and are fundamental. They are not restricted to educating the power of observing by means of the senses. Aboriginal tribes possess this power, but they are not therefore said to be educated. "*Cognito per causas ultimas*"—the definition of a true science—means an achievement of the human mind. It is not probable that a student could follow this achievement of mind through difficult paths without his own intellectual ability being powerfully reenforced. This is one of the reasons why science has educating power. It has a strongly intellectual character; therefore a tendency to the abstract, and to comprehensive generalizing. It is therefore best, since it requires a corresponding mental power, to leave it to the later years of the course. If begun too early it will cause lack of interest, because of lack of novelty, when the true difficulty of the subject is opened, and the boy is disappointed in not finding it all showy experiment.

Physics and chemistry have with justice been looked upon as well adapted to education. In proportion as a subject of investigation becomes scientific, so it ordinarily appeals to these fundamental sciences. In the sense taken physics covers astronomy. Chemistry itself is rapidly being organized as molecular physics, and physics in their turn in their wide sense is the development of mechanics. This reduction will show at once that science is nothing really new in a college. In the form of astronomy it was a familiar subject ages ago, and as mechanics also. This is a significant proof that no new educational factor has

been discovered in modern times, but an old one developed and pushed into prominence. Physics and chemistry may be reckoned as the descendants of the "*philosophia naturalis*" of the schools, as modern astronomy is that of the "*cosmologia*." Modern chemistry is willing to trace its genealogy to the alchemia of old—which the schoolmen, however, were prudent enough not to commit themselves to, for they had the instinct to recognize it as not a science.

In the old days the horizon of the natural sciences was limited; education was therefore literary and philosophical. But nothing taught in the class could be "transmitted" in an examination. Science as far as it went had standing in the curriculum. Having grown to be of much more consequence, more important in every sense, and of acknowledged value in education, it would appear curious if to-day a quarter of the time should be given for several years to science, and that it at no time should become the subject of inquiry concerning the students' progress therein. It does not look consistent, in view of the time sacrificed, not to make this subject one that must be satisfactorily accounted for by the student in examinations intended to test his qualifications for advancement. If the anomaly is to be accounted for by the fact that science is too difficult, it may be found that it is begun too early; if other, even more important elements are not to be questioned. Whatever may be the reason, the fact will bring about unpleasant consequences. No real attention will be paid to class lectures. We must take the boy as he is—he is a fact, like any other fact. He is also able occasionally to discover a fact; and when he discovers the particular one that a certain branch "does not count," he will not trouble himself about seriously studying it. Foresight and conscientiousness about his purpose at school are not his strong points. He will be alert when an experiment by the professor entertains him. Apart from that he will be inattentive or worse. This is *electivism* of the worse type; to leave it to the student whether he will study or not. It is not nearly so objectionable to let him choose what he would study. There is no more reason to suppose science to possess a self-supporting interest than any other branch. Its entertaining features, its practical features, its possible direct future usefulness, are no guaranty whatever that it can do without the moral force of an impending examination or the equivalent, and one that "counts," i. e., qualifies for standing. No boy can be educated if he can not or will not work, and an examination is the only reason the average boy can see why he should work. There is another objectionable feature in not giving science the full importance of the other studies. A science teacher's work is peculiarly laborious, far more than any other, and the more and better facilities and equipment he has at his disposal the more will this peculiar laboriousness weigh upon him. He will never be "through." The classroom is but a fraction of his work, and a small one at that. It is not encouraging to teach what will not be studied. Under such conditions science is not furthering education, but rather demoralizing it. Any branch of study in which the student need not qualify and independently of which he may go on to a higher class loses caste, and its teacher influence. Not only with the student; it may come to be a vague impression among the faculty that science is tolerated, perhaps, because it is an advertisement. It will therefore be considered a "chair" anyone can fill, as there will be no call for results. College boys, in their own way, are liable to be logical in such a juncture, and they will carry the spirit of the science class into the other rooms also. This may not be a case of "poetic justice," but it may be expected to happen, because there is sympathy and reaction between the constituent parts of a moral unit—the college course.

Supposing, therefore, that its importance is recognized, how should science be taught? The time-honored method in which the teacher is the chief factor does not lose its value here. By the time they enter upon the field of science the scholars are accustomed to the method. It should be followed for the sake of uniformity, and, above all, because of its intrinsic merit. It is, moreover, particu-

larly valuable in science. A determined young man could learn Latin and Greek from a text-book; he could not get an equal grasp on science in this way in the same time. It can not be taught, either, even by a teacher simply expatiating on a few paragraphs of a text-book and making the experiments according to the directions in the text (many of these books are constantly patronizing the teacher).

There is something singularly elusive about scientific knowledge in itself. A teacher may for a number of seasons work, read, study, and teach, all along believing he is certain of his doctrine, and then somehow a new light breaks in and he discovers gaps and vacancies in his scientific knowledge. The legitimate title to a "potest docere" is no more easily acquired in science than in any other subject, even if experimental resourcefulness and manipulative skill were spontaneous and not dependent also on ability developed by application. "Elements of mechanics" does not sound forbidding, but it is not synonymous with "Easy lessons in science." This statement might be illustrated by referring to a prolonged controversy in which some years ago the leading physicists of England figured concerning "mass" and "weight." Yet almost anybody, except a physicist who has taught and thought, will expound these notions fearlessly!

The teacher must be sure enough of his subject not to make a statement in optics which he retracts in electricity, whether he is aware of his inconsistency or not. The teacher to whom science is a dreary task is fated to do this as a regular thing, and it is not probable that there is a science teacher who has escaped such a mishap altogether.

For many reasons a good text-book is indispensable to teacher and student alike; particularly in science classes. It may be looked upon as a secondary teacher, and as such all its paragraphs are of importance to the scholar. But it should be the teacher's servant and not constrain him, except topically. One of its advantages is that it saves extensive "taking notes"—a labor which the leisurely work of the laboratory more especially demands.

Far more text-books are published in science than in any other subject. While this may be owing, to a degree, to the notion that science has come to control, if not to save, education, it is more likely owing, to a greater extent, to the diversified status of science in the various institutions of learning. Few of these books seem satisfactory. Publishers foster the notion that the text-book is everything, and they are ready to furnish one that will teach the teacher as well as the pupil. Text-book worship is not conducive to good results. The student feels secure with his fetich against the day of account. "It is all in the book," and he has been given to understand that the book contains it all. Thereupon he comes to resent any departure from the inviolable text. Exactly as, e. g., in geometry when its text-books do the teaching. Invert the figures or change the letters and the student's demonstration collapses. The text-book should not use the teacher, but the teacher the text-book. Of course, where the text-book is the teacher's life-preserver, this "hysteron proteron" arrangement is the only possible one. The text-book, whether it be permitted to figure as the court of appeal or not, had better be severe and a little "too hard" than too easy. "Science primers" have no business in a college. Students instinctively measure the importance or difficulty of the whole subject by using the text-book as the yardstick.

With occasional exceptions, the youthful mind seems to oppose a high resistivity to mathematics. It is hopeless to teach science unless, beginning in the lower grades, the teaching of mathematics has been kept at a sufficiently high potential to penetrate the insulation. While elaborate demonstrations in college science classes are probably out of place, the discussion of simple formula should be within the reach of the pupils. Graphical presentation of such expressions by coordinate diagrams is welcomed, as a rule. To a certain extent, such diagrams show "how the thing works," and the youth of our inventive race may be expected to appreciate this and grasp the meaning.

Science teaching is a specialty as much as any other difficult subject, and therefore it is a man's work, for a man's time, as teacher, and can not, without its collapse as a branch of a study, be committed to anyone at any time with incessant change. If a college possesses a material equipment of any value, there will be a marked "depreciation of plant" in consequence of such changes.

A class will more quickly find it out in science than in other subjects whether the teacher is "at home" or "at sea." Owing to the vast extent to which scientific applications dominate not only industry but domestic life, some inquisitive freshman (boys can be trusted to do a great deal of observing, though their intentions may not be scientific) will always be found of whose questions the teacher will be afraid. Science is precisely the subject in which boys do not like an evasion, and are most disinclined to condone ignorance and sharpest to discover it. A teacher beginning his career in the classics has a better chance to escape having his soundings taken than a science master, not precisely a beginner, either.

The college intrusts to the scientific teacher implicitly a share of the responsibility of the professor of mental philosophy. Metaphysics, general and special, is without doubt the culmination of the college course. Through this study the course reaches its purpose, imparting to the student an ability to weigh and consider, on broad lines, at least, in a rational manner and with judgment, the most important field by far of all, that of human thought. This means intellectual self-possession.

The science teacher can and ought to lend his aid. The professor of metaphysics can hardly be expected to more than touch science theories, and can not be reasonably expected to do so, since he must till fields illimitable beyond that. While working with these theories technically, the science teacher has opportunity over and over again to weigh them philosophically. The text-book and the teacher who has only a text-book horizon will leave the student under the impression that there is no appeal from atoms and molecules. Scientific propositions—almost all of them—are "working hypotheses," some of which may be objectively true, while many of them are certainly not true. But they are treated, and quite properly so, for science purposes as if they were true. The world overlooks this, and does not question the objective validity of the "placita" of science. This is philosophically the most powerful reason why science must be taught in a college, taught properly, and not taught exclusively. For of itself science has no tendency whatever to develop a "broad," well-balanced habit of mental estimate, any more than the discredited "metaphysics of the schools" with its quibbles. A warped mind—one fed on a single pabulum—is always cock-sure, and that is the very reason why our army of sciolists (largely the "writers" and science camp-followers, but seldom the workers) is agreed that science is everything, and all else "antiquated." This "schlagwort" is particularly directed against metaphysics, and then does service for stronger terms which would declare it ridiculous if not grotesque.

Though a man may, with increasing administration as the years of his work in science increase, note the marvelous compactness, solidity, simplicity, and beauty of the theories of physics and chemistry, as they have been worked out, altered, and bettered gradually by real master minds, it is not true that they gain in the same proportion in the objective probability of their being final. Serious reflection, or better, years of experience, in conjunction with reflection, will convince a man that on the one hand a true master in the physical sciences is the least inclined to be a dogmatizer, and that on the other a discovery, such as that of the existence of undreamed-of "radiations," does not at all signify the "collapse of another scientific theory." In fewer words, all this means that the science teacher can work in a wide educational field, and ought not to forget to state the standing of science in intellectual court. The text-book will not—nor the self-

styled "great educator of the people"—the press. For much of what passes as science the proof is iteration of statement—

"I've said it thrice;
What I say three times is true."

It is therefore greatly to be desired that the science teacher should stand for more than the explanation of the parallelogram of velocities, or as the mouth-piece of the text-book. He should be the mentor of his class, for he is supposed to educate.

Catholic colleges so thoroughly recognize the importance of a well-trained and able teacher that if nothing further were involved there would be no reason why they should not occupy prominent positions in the field of science. A circumstance working against it seriously is the general meagerness of equipment. Even if it were lavish, the science teacher is never going to escape the issue of becoming at least half artisan, besides being a whole teacher. He must possess resourcefulness and try conclusions in almost every handicraft. I need not say that this forms the laboriousness of science, and that it is unavoidable, and can not be wholly left to "help"—financial or otherwise.

Experimental demonstration must accompany science teaching. A successful experiment well arranged and clearly managed, indorses what the teacher says, and impresses it. It is worth a hundred repetitions of the statement which it demonstrates. Even with it, science does not become easy, and is intangible to young minds without it. The youth had better go to school to a first-class experimenter, provided the latter is a teacher, than to a powerful reasoner on abstract formulas. This does not mean that a good, roomy "blackboard" does not rank high as "apparatus." It is part of the class room, and a suitable lecture and laboratory room outrank everything in importance in the matter of equipment. It will not do to assign to science anything left over after all the other branches have been solicitously housed. With such a handicap a "cabinet" may figure in the catalogue and not in the course. I am certain that any science teacher with experience will care much more for a good class room than for an array of apparatus, and would rather work in a shed reasonably well built to keep out the weather—if such quarters were designed for the purpose—rather than in a palatial college building, which an architect had "planned" largely with a view to demonstrating to the town's folk what he could do with the outside of a house. The grand building may cause the science teacher to rank more than half his working day not even up to the level of an artisan. He will be carrying on a quixotic fight against the windmills of adverse circumstances for the sake of a few handicapped experiments. Science teaching ought to be relieved from the necessity of displaying heroism.

If an institution is proud of its library, it has precisely the same reason to appoint its cabinet. This is also a reference library; apparatus instead of books. A library may be injudiciously selected, and so also may capital be invested in a cabinet without proper returns. A man should not buy a carriage when he does not expect to own a horse—unless it be an automobile—and for the same reason ought not to provide a costly instrument by its very nature intended for abstruse "private research," when no such purpose is compassed by the course, and when essential class room apparatus is wanting. Of course, I would not object to donations. For college purposes the cabinet would permanently be intended to serve the teacher's lectures. It is an art to select wisely; just as a wise head is required to see to the increase of the library. Instruments should be on a sort of uniform scale, and meet the condition of working together as much as possible. The import of this remark may be too technical to enlarge upon here, but a science teacher will understand. To administrators of colleges, however, it should suggest the fact that a dozen pieces of apparatus may, if well chosen, cover the field

of a half hundred not mutually adaptable. A very useful book could be written on the subject, "How to select apparatus." It would probably be written by a man who had made a lot of mistakes.

If the above be kept in view, it appears that the expensiveness of science may be overrated, while a great university might feel starved with the interest on a million devoted to science purposes, a college with no specializing ambitions—an ambition out of place—might thrive scientifically on the interest of one-tenth of that amount. Undoubtedly many a college professor of ours ekes out a scientific existence on the cube root of that sum and annually rejoices.

The college that sees its way to it and undertakes to establish the laboratory as a complement to and to go hand in hand with the class room, enters upon a commendable enterprise. The laboratory entails no little labor, and therefore the drudgery and detail of it should not fall upon one and the same teacher, if possible. He will do poor class-room work, and an inferior laboratory results. The laboratory need not invade class hours, and it is perhaps safer not to make it compulsory. Too many students would, after the first rush of enthusiasm is over, be found to lose interest and drag the rest. This proceeding has its analogies in other studies. Not uncommonly the interests of even a single student are consulted in language, mathematics, the humanities, etc., out of class hours. Teachers are always willing to do this and colleges encourage both teacher and scholars to do it. While the latter are therefore free to avail themselves of such advantage, it is obvious that the study of a given subject is not therefore made elective. The elective laboratory is simply a standing offer to the student to assist his progress. It is well, nevertheless, to encourage his accepting it.

Large claims are made nowadays as to the necessity of laboratory work for college boys. To what extent they are well founded experience seems not to have made entirely clear. There may be the confusing of issues again between stocking a student with facts and educating him. Making a boy expert in performing a certain set of experiments is not necessarily identical with an increase of scientific knowledge. Possibly it is owing to the confusion of these two things that so much clamor is made about the laboratory and the indescribable importance of a child in knickerbockers measuring the laboratory table with a meter stick, or, more ambitiously, rediscovering the principles of electro-magnetism with an assurance that leaves the child with little reverence for the prince of experimenters, Michael Faraday. In primary classes it certainly seems useless to do this sort of work unless for recreation. But for the maturer students it is undeniably true that personal observation is an incentive and check together, an excellent combination not easily cultivated in the class room alone. Exact method of observation and measurement is the aim of the laboratory directly. It is a distinctly human way of learning, and for that reason engages interest. It improves the student for the next class lecture and recitation.

But "*ne quid nimis*." One reason, possibly, why the laboratory is supposed to be a distinctly modern method which has driven out or forced into obscurity the class room, is because too much science and too much laboratory are responsible for the host of poor teachers. I do not mean ignorant men.

Physics alone will not make a teacher. A young man primed with physics and laboratory work and entirely up to date in scientific methods has not, therefore, his success assured in the class room. Therefore, he will take refuge in the laboratory. He may have been taught by just such a professor. His education gave him no idea how to present a subject—no command of language, no delivery, and, with all his sharpness of observing power and manipulative skill, no address. It seems not uncommon in modern institutions to engage a teacher whose recommendations have an air of nobility. He has done such and such "original work" under professor so and so, in that commanding university, and has published

papers. Of course the effect is cumulative, and hence the ratio of efficiency of the laboratory against the class room rises in favor of the former with successive generations. The first-class teacher of the old times, who was educated with all his faculties in equilibrium, is vanishing and the professor, demonstrator, and tutor, who knows much and can write abstruse books and publish "papers," but who is as communicative as a sphinx before an audience (unless he has his lecture written), is taking his place.

Teaching is largely inspiration. Where, owing to training, this can not be looked for, the proof is at hand that the laboratory is the acme and "ne plus ultra" of teaching.

Every college graduate ought to be something of a teacher of men, and ought to have something of a teacher's command of his surroundings. This is not a laboratory product directly. It is more that of the old-time liberal education. Nevertheless, the training of the laboratory will teach that same man how to weigh his data and observe relations critically and dispassionately. If it accomplishes this—and there is good reason to think that it does—then college laboratory work, added to the old curriculum, will materially improve college education. A live teacher may fairly well cover the requirements of college science in the class room if circumstances make the laboratory impossible. But the old course did not take it for granted that a single man could teach any number of students simultaneously. If 25 is a large enough number on the roll call of the rhetoric professor, then, for the same reason, that number is enough for the science class. An unsatisfactory state of affairs obtains not unfrequently. The same teacher teaches not only all the sciences, but mathematics as well, and has a composite audience of 50 or 60 in most of his teaching hours. There is little to show that it is advantageous to add a laboratory to his hours. He is already overloaded. There is only one remedy: Increase the teaching personnel; decrease the number in the classes. If in the order of studies of a college you find a laboratory figuring, and classes involving the teaching of a number of difficult experimental sciences to a minimum of a half hundred students in each class, and then discover that in the list of officers and faculty all the responsibility for it can be traced to one man, you may be sure that the science situation is not comprehended. You will find, very probably, that the laboratories, e. g., are not used—about the best use that could be made of them under the circumstances.

Many "modern" institutions are evidently working science for more than it is worth. They aim at being universities as primary schools aim at being high schools, and these in turn build into the college campus. Among our own, however, the tendency seems to be the other way, owing, no doubt, to the above-named conditions—want of facilities in class or laboratory rooms, equipment, teaching personnel, and over-crowded classes. When a laboratory is essayed (somehow it looks like a psychological phenomenon!) it is always chemical. Work in it never gets beyond the stage of qualitative analysis and rarely even passes what the text-books call "experiment." That is, in the latter case nothing is really added to what has been witnessed in the class room, except the risk of doing it yourself. Of course it is not useless! The privilege of trying an experiment yourself will assuredly engage attention to the class lecture. But the real laboratory begins only when the student's ability to show quantitative results is challenged. Making hydrogen gas in a flask or burning the handle of a "static" machine are experiments that can be matched by a hundred others without, properly speaking, representing the laboratory. It may be interesting, but has not particular educating value. The laboratory will prove an educator when it is carried to such a point that the light begins to dawn upon the student, by which he sees how science comes to its conclusions. This light will illuminate a new horizon for him. He will begin to realize limitations, begin to weigh evidence, and find his self conceit checked, while at the same time he learns rapidly and improves his ability to learn.

Where laboratory work is of the right kind it may now and then take the place of the regular class lecture. But the teacher must be at hand. He, too, should select the work judiciously; excluding what is too obvious or only of special import. Specializing is university work, or, under circumstances, that of the technical school. Measurements pretty sure to result in discomfiture, owing to unsuitable apparatus, or to their being open to too many abtrusive sources of error, should be avoided. It is not good policy, generally, to discourage a laboratory fledgeling with his first flight. It is easy to check too great assurance at any time, when it is necessary to impress upon a scholar what scientific accuracy means.

The statements made may be summarized as follows: While science is not a new element in college courses, it has, within the century, assumed proportions that appear to put the education question in a new phase.

Physical science demands admission to the course upon very good credentials. But the interests of education are not best served by a revolution in the curriculum, nor by a reconstruction which involves a radical change. Science may crowd, e. g., the humanities somewhat, but not necessarily to an extent which would sacrifice them.

It should not be permitted to do so. The reason is that though it might be proved that science educates, trains and cultivates as well as other subjects, it also, like other subjects, can not alone stand for a complete education.

Just as the college course does not contemplate philology, for instance, in the pursuit of classic study, so, too, and for the same reason, science does not specialize, but remains general. Science is not technical or professional information.

While best placed in the later years on account of its difficulty, there is a plain advantage in having scientifically informed teachers in all the classes.

The teacher rates higher than text-book or laboratory. It is always to be remembered that the college trains the still young mind. This needs the teacher. The intellectual independence of the university "auditor" can not be assured in the college alumnus. It is not, therefore, "*quia traditum est*" nor "*quia a majoribus institutum*," that stress is laid on the teacher, though it is true that credit must be given to our "Majores" for their appreciation of Providence's truly scientific method, which is plainly that of direct personal teaching.

It is precisely because the science teacher takes his pupil directly into the Lord's infinitely rich, though only material creation, that he ought to be a cicerone worthy of the name. The best informed and most experienced science teacher will best realize that for one stone he has looked under, a million remain unturned.

"Exercises" such as are called for by the teacher of classics and compositions (from simple narrations and descriptions to ambitious orations) can, in science, be properly paralleled only by the laboratory. This justifies its introduction, and its claim to being properly managed, and having its purpose clearly understood. A camera club does not represent this element. On the contrary, it may represent a nuisance.

The apprehension of its expensiveness may lead instinctively to an unformulated, but nevertheless existent bias to repress science. Not a little depends on how science is conducted. Chemistry at college need not involve heavy financing. Physics investments are usually permanent. Some equipment is necessary, and it is perilous not to face this issue, for the demands of science are not going to diminish in the near future. It is therefore prudent to improve science conditions steadily—a little at a time.

Finally, students' libraries, for the same and, perhaps, even greater reason, should be looked to. Science should have its shelf. It is much better than that our "illustrated magazines" should command shelves and the reading tables besides. Also, science is better than fiction. The classroom, laboratory, and

library go together. Where one is meager you will find the others scant. The rank of the library needs no plaidoyer. If I could not get both I would rather have books than apparatus, and would choose a good teacher in preference to both, if I were limited to one out of three elements. Where they can be brought together, the best results can be expected, and education will prosper under the influence of the physical science.

THE TEACHING OF HISTORY IN COLLEGE.

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To prove the value and indispensability of the study of history would almost seem a task as superfluous as the exertion to prove the value of the sun upon animal life. Those who are familiar with the rich enjoyments and the vast treasure which the temple of history contains, will not deign to consider the arguments even in its favor. Those who have feasted upon the solid nourishment which Clio spreads before the guests who gather around her banquet table need no argumentative inducement to acquiesce in a proposition which finds their approval in advance. If, however, our approval of a certain subject for study should prove the superfluity of argument in its favor, it would equally apply to every topic upon the programme of this conference. Moreover, it can not be denied that the teaching of history in college is not emphasized as it deserves to be. Nor does the method of teaching history receive the attention which the importance of it demands.

By training and view point we do not belong to the category of those who make the study of the classics a debatable question. But the difficulty of acquiring the knowledge of the classics and of mastering them makes it more than an open question with students and often requires much persuasion to acquiesce in the quantity and quality prescribed by the college curriculum. Not so in the study of history. There is a natural feeling which attracts all men to the study of history which argues strongly in favor of teaching it. The imagination dwells with pleasure upon the past and the mind becomes enriched in meditating upon the pictures which history draws upon its canvas. This feeling is deeply noted in the emotional as well as in the moral nature of mankind, and whenever that nature is not tainted by corruption and is in a healthy and normal state of development it will manifest its sympathy with the struggles and victories of the human family as it is sketched by the faithful hand of history. To know this great human family to which we belong; to understand its intellectual and spiritual life; to follow the great stream upon which its skiff was pushing on toward the golden shores of Ideality, and upon which we oft drift along in uncertainty, must be and is regarded as of the highest human interest.

The true life of humanity is unfolded and recognized in history as in no other branch of knowledge. Here the energies, the aspirations, the struggles, the hopes, and the ambitions of mankind are laid bare for the reflection of the student. Without history each generation would go its own way, and would be doomed to tread the same path forever. In history all generations are linked together, and she thus becomes the consciousness of humanity. In the study of history the student learns to realize the traditions and experiences of centuries. The ideas, the knowledge, and discoveries of all nations and all ages. What wise men thought, what great heroes suffered, what the heart of man craved for, is transmitted to him as a precious heritage, together with the last testament of the dead past, that he may develop it into perfection.

A part of the object of education is to furnish the student with such instru-

ments of knowledge as will make him comprehend the better and the easier all that may occur in private and public life, and thus enable him to press these occurrences into service for the highest good; but without the study of history every book will be to him valueless because unintelligible, the most important events only so many accidents, the present a riddle, and the future a sealed book. Philosophy, at once the most daring and the noblest aspiration of human thought, is soaring aimlessly without the compass which history furnishes, and is inevitably lost in the unintelligible without her guide. The precious twins of cultured life, art and poetry, become a mere pastime, a wild phantasy of a fevered imagination, unless they are nursed upon the breast of history which throws light upon the times which produced them and the inspirations that gave them life. In history the student is able to overlook from an elevated position the ever-changing actions of individuals and nations, to learn that nothing that happens is new and startling. By the guidance of history he is made to discern easily the hidden motives of human action and to divine the consequences, and thus the past becomes the key to the present, and the present the mirror of the future. It helps to remove the prejudice of early training or of environments; it broadens the sympathies of the student and teaches him to trace the footprints of God in his dealings with the human family in history.

All sciences stand in some relation to each other, and one aids and explains the other. In this wide sense we might say that all the philosophical, mathematical, physical, and philological sciences stand in some relation to history; but even in a stricter sense many sciences, like chronology, geography, genealogy, diplomacy, sphragistics, heraldry, numismatics, and statistics are the essential auxiliary sciences of history, and they receive much light from her. History is the school of the statesman, the text-book of the laws and the cults of nations for the jurist, and inspiring gallery of a struggling brotherhood, and of moral heroes for the priest, the holy and ever-burning fire for the imagination of the poet and artist, a source of inexhaustible themes for the orator, and the mother of half of the sciences.

Nor should it be overlooked that history furnishes the student with powerful weapons in the defense of truth and religion. Not in vain did the church, especially in the last century, by the mouth of her pontiff, argue for a deeper study of history. True history, and only such, should be taught. True history bears testimony to our most holy faith, and under her torchlight the beauty of our faith is heightened, and heresy, incapable of the blush of shame, appears more shameful and repulsive. Righteousness and virtue have their power in their charm and greatness. Righteousness is not always victorious, and virtue does not always bring happiness; and this highness, their moral dignity and their luster, consist in self-sacrifice and self-abnegation. This is the teaching of morality, but the abstract idea of duty wins more cheerful followers by the aid of symbolized examples of actual life. In the examples which history furnishes, which inspire love and compel admiration, the abstract moral system is transformed into a living picture of acting individuals and nations. He who enters into the gallery of great and noble men is permeated with the dignity of human nature, and his energies are spurred on to exercise in true imitation. True, these examples may be few, but they are not less elevating, nor they are rather more so, in contrast with vices of the majority.

These are some of the charms and immense advantages which urge strongly in favor of emphasizing the teaching of history, and here are some of the dangers in the path of him who wishes to suck the honey of history, a beautiful flower full of thorns in the garden of the sciences.

History can accomplish all I have claimed as long as she is permitted to remain in the service of truth and to be the handmaid of religion; but history has been perverted and made to serve partisan ends and to plead the cause of unrighteousness. In the letter to the Cardinals de Luca, Pitra, and Hergenroether, dated August

15, 1883, and dealing with the advancement of the science of the study of history, our holy father Leo XIII characterizes most eloquently: "Those who in order to cast suspicion upon the church and the papacy attack most powerfully and with cunningness the part of history which belongs in a specific manner to the Christian period. These weapons of attack," proceeds the pope, "were made use of three hundred years ago by the centuriators of Magdeburg. Seeing that the originators and followers of the new sect could not destroy the fortifications which surround the Catholic Church, they attempted by strategy to force the church into historical discussions. This method of treating history was followed by all the schools that alienated themselves from the church. The same strategy is still employed at the present time, and to-day more than ever may it be said that the art employed in historiography is nothing less than a conspiracy against the truth. The worst of it is that this method of treating history found entrance into the schoolroom, and very often the children received their historical instruction from books which are filled with misrepresentations. If the teacher is frivolously and wickedly inclined, the young reader is made acquainted with a history which inclines him to treat with contempt a venerated antiquity and to proudly despise holy things and persons. The danger increases in the higher studies of history where, from a mere statement of facts, the study leads on to the investigation and critical examination of the facts themselves, and there the student is made to start from false stories which are in sharp contrast with revelation and have for their aim the denial of the blessings of Christian institutions in the life of the nations.

"Once history becomes the abettor of partisan tendencies and human passion, the extent of the danger and the disastrous consequences are hardly conceivable. For then she is no longer the teacher of life and the light of truth, as she was of old, but a participant in crimes and a courtesan in corruption, and especially for the young student, whose mind is filled with romances and whose sense is disinclined toward reverence and modesty. The youthful mind, easily impressed, is taken possession of, and the false presentation of the events and men which pass before him in a vivid manner, are engraved upon his mind for the whole of his life. The poison thus instilled in tender age into the mind can hardly be eradicated in later life, for but few are prepared in matured age to devote much time to a closer investigation of history, and the fatal training of earlier days is only confirmed by erroneous views of maturer life. It is therefore of supreme importance to obviate such dangers and to prevent such a noble science as history from becoming a storehouse of material for the destruction of the individual or the world at large."

The danger so vigorously pictured by the pontiff, and which is familiar to every student of history, is the result of unreliable text-books, such as are colorless, written by men who in modern times boast of being historiographers without an opinion, and which leaves the young student ample opportunity to form his own opinion, which, by the very nature of things, inexperience in forming judgment, lack of information, disinclination for the truth as a result of early training, must, in the majority of cases, prove fatal in the end. As I intend to speak of this later on, a hint is sufficient here. The modern destructive method of interpreting history, which inclines the mind not to search in order to find the truth, but which with the skeptic's eye is eagerly seeking to find evidences against it, has contributed no little toward the dangers against which the words of Leo XIII, above cited, warn and exhort us.

To remove, or at least minimize these dangers, we must adopt a proper method of treating history, a few suggestions of which are submitted for your kind consideration.

A mere mechanical memorizing of dates, facts, persons, and names is to be studiously avoided. All these skeletons must be clothed with a body, and a living soul must be infused into them, so that the student can see and comprehend the

action of persons and the significance of dates, facts, and events. No other science abhors so much scattered, isolated, and fragmentary treatment as does the science of history, and in no other field of investigation as in that of history can the teacher expect less results under such treatment. In teaching history more than in the instruction of any other branch of knowledge, is disconnection more marked, and the absence of a unifying principle more painfully felt. The time, the place, and the persons must be treated in a coherent process by the teacher, and in a manner that will throw light upon the events, and make them comprehensible to the student, and thus impress them upon his mind. This requires a somewhat philosophical treatment of the causes of the events, and especially of institutions, and more particularly so of religious institutions, or of the moral causes calling such institutions into being, or contributing toward their development. The various causes leading up to the various events, mediate or immediate; internal or external; physical or moral, must be carefully treated and critically examined. The most important events in history are sometimes the result of apparently most insignificant circumstances, so that one is justly astonished to notice the apparently weak link to which is fastened the most heavy chain of events. These small events must not escape the critical eyes of the teacher. In the physical world the little pebble thrown into the river causes the extended ripple, the dewdrops an avalanche, a spark the destructive flame, and a grain of sand will destroy the balance of a loaded wagon. So in history, that which decides the fate of nations for centuries is often produced by the most insignificant circumstances or persons. In these remarkable and often insignificant incidents, the student should be made to see, not the blind accidents, but to adore the mysterious operations of an infinite spirit, whose ever-seeing eye penetrates the future, who brings the calculations of human wisdom to naught, and uses the power of human ambition to carry out His plan. These workings of an infinite spirit in history must ever be pointed by the teacher as the golden linings over the darkest clouds in human events, and as the silvery thread that holds them all together. A teacher may gather his pupils in the forest, around a nightingale's nest, to discuss, critically, the nature and characteristics of the bird, while the bird itself, scared by their noisy disputations, leaves the nest, and from beneath the shadow of a far-off thicket are heard the melodies of its music. Likewise, the method of teaching history may be ever so critical, but it must not so deafen the moral teaching of the students as to make them miss the sweet music of Him who guides the actions of individuals and nations, and holds them all in the hollow of His hands.

The development of each one in the manifestation of His vast powers and energies, and the development of the individual in communal life of the family, the tribe or the nation where the ideas, powers, and energies of the individual are supplemented by the ideas of the other members of society; and where the labors and achievements of one generation are bequeathed for another generation forms the history of a particular nation. The particular characteristics, habits of thought, customs and culture of the various nations, in a word, the history of the world, of mankind upon earth, the changes of the earth through man, and the changes in lives of man and nations, by virtue of living upon earth, or in a particular spot on this earth at a particular time, tracing these various changes to their final causes and to sum up the final process of development of humanity as a whole, is the specific office of the teacher of history.

To apply this treatment to the whole of history in detail would indeed be a task which no professor could undertake or solve with any degree of success within the narrow limits of a college curriculum. Such a method of teaching history might justly be condemned as impossible, and hence impracticable for the purposes which are the aim of this assembly. However, this task will draw its own sphere and determine its own limitations.

An individual is oft manifested in a single act or word. The spirit which ani-

mates a whole nation or epoch in history, the principal motives which guide a nation, and the underlying principles which form the soul of a whole epoch, all of which may appear like a net to the student, will be braced and gathered by the skillful teacher from a few features. The teacher will not direct his attention in the class room to the manifold manifestation of each individual or nation or epoch, but his aim will be to deal with some particular characteristic act or acts of such person or persons, whose marked influence upon the destinies of the particular period is predominant, and only such multifariousness which form themselves into unifying historic characters will he attempt to deal with and to bring them conspicuously clear before the mind of the student, and only such nations or group of nations will he admit for consideration into his philosophic discussion whose contribution toward the development of history, and especially on a certain period of history, is preeminent.

There is no reason why the treatment of history which I have spoken of could not be applied successfully to the various parts or sections or epochs of history. In Catholic colleges the history of the Middle Ages would seem a most interesting, and certainly most fruitful, epoch to deal with. The specific features and characteristics of that age, the various institutions, the church, the state, the relation of one to another, education, art, science, all of which is so little understood in even educated Catholic circles, and so much misrepresented by non-Catholic writers, ought to receive our particular attention. The chapter of the Renaissance, where much of the historic cobweb which modern historians hung around its door as the drapery of their fervid and partial imagination, covers also the face and understanding of the student, which the teacher should clear away, and thus prepare the way for a profitable study of the history of the sixteenth century.

The history of the so-called Reformation, the personages and their characteristics, their principles, religious and civil, their motives and their temperament, the changes of a temporal or religious nature of permanent value, all demand a careful treatment at our hands, and all are not too extensive. The same is true of the French Revolution, of the period of constitutionalism, of the *Cultur-Kampf*, and many other periods in history.

Nor should the teacher be unmindful of the fact that the college is only the barrack where men are to be drilled for future action in battles which life provides. Hence, he must acquaint the student with the instruments which he is to use, their nature and character, and how to use them. He must acquaint the student with the key or keys to the study of history; how and with what temper he should approach the study of history and each particular epoch. In this modern age, where every newspaper and periodical pretends to have mastered every department of science, where everybody reads everything indiscriminately, the student comes to the study of history with a confusion of ideas which we who deal with the problems of education are too painfully aware of, and which the proper method of teaching history, which the initiation of the proper study of history forms a part, should eradicate.

The history of the United States demands our particular attention. The difficulties in this particular study can hardly be overestimated. But a few works of any permanent value are on hand. The changes in this country have been great and rapid. Most writers on American history were either led astray by external glitter and a startling manifestation of material power, and some were guided by partisan prejudices, which is natural under the prevailing circumstances, and not a few could not dominate the complexity of the national character and the intricacies of our peculiar form of government. For the Catholic student a thorough comprehension of the history of this country is indispensable. However, a thorough grasp of the history of the Reformation period will considerably aid both the teacher and the student in the study of the history of the United States.

That the task which is herein outlined for the teacher of history is not an easy one is readily admitted, but it is one fully worthy of him who is to train the young and inspiring to contemplate.

Bodin says: "*Quis dubitat, quin historicus vir gravis, integer, severus, intelligens, disertus et quasi communis ac privatæ vitæ, omniumque rerum magnarum scientia instructus esse debeat.*" Much the same is true of the teacher of history. Hence in my scheme I speak of the stress that should be laid on the knowledge, skill, and religious view of the teachers of history in colleges.

The teacher of history must be possessed of historic knowledge, or, rather, filled with the historic spirit. He must possess a lofty historic intellect, that goes around the globe, and not one that is limited by his own horizon. His posture and bearing toward all truth must be enterprising, ever ready to plunge into new fields of investigation; vigilant, precise, and even tempered in his investigation; but withal imbued with a spirit of reverence toward all that passes before his critical mind—a childlike spirit, ever open for the truth—for, as Bacon well remarks, the kingdom of science, like the kingdom of Heaven, is open only to the child, the docile, the recipient and reverent mind.

The teacher of history must have the historic spirit in the sense that history to him is not a mere volume of biographies of avaricious individuals, a mere catalogue of events. One whose theory of history is atomic, a theory that does not recognize the common humanity to be manifested in the millions of individuals and the multitudes of ages and epochs, a theory of history which has no principle, no organization—such a one is unfit to occupy the high and honored position of a teacher of history. To the true historic mind there is nothing in history irrelative; every account of a particular period is to it but a small section of the great historic protest born of the same historic spirit which preceded, and which will again be a factor in the future; the several ages of which it takes cognizance have some inward connection with each other, a common tendency, and consequently the whole, entire task stands in some relation to the present. That modern spirit of unguarded enthusiasm for everything new and modern, which abhors the past and idolizes the present, that modern spirit which has revived the pagan spirit of nationalism whereby the Englishman regards the German from his standpoint only, and vice versa, is one that deprives men of historic spirit and makes the possessor of it unfit to teach history and his presence in the class room a danger.

The teacher of history must have skill—skill in presenting historical events, skill in narration—so that all the events and persons must pass before us like a drama, captivating our interest to a degree that we feel impelled to live the same life and to participate in the same plans; skill to attract and hold the intense attention of the student and to carry him higher through the many ages and various events. It may be objected that the qualities in the teacher above insisted upon would result in the presentation of history from a subjective, and not from an objective, view point. Objectivity in the presentation of history, I readily admit, is not only desirable but indispensable in the teacher no less than in the historiographer. But objectivity must not be confounded with a void, empty, and blank mind in the professor of history. Professor, I said for the first time, and not without intention. There is quite a distinction between the preceptor and professor.

Profitemur. We who teach in a college must have something to profess of our own views, of the result of our studies and investigation, and not be ashamed of our scientific convictions, or we cease to be professors and become mere school masters. Objectivity in weighing evidence, in a critical examination of documents, in comparing various facts with each other, is more assuredly to be insisted upon, but the teacher must nevertheless approach the study of each nation and epoch with some view point after careful investigation, and these conclusions he must profess before his students. *Profitemur.*

That the view point of the professor of history is a matter of most vital concern goes without saying. Upon the view point of the professor will depend whether persons in history—as, for instance, those prominently figuring at the introduction of Christianity—will be regarded as fanatics, hypocrites, and knaves, or as Heaven's messengers dying in the interest of immortal truth. We must assuredly insist that the historic view point of the professor should be a religious one. He must occupy theistic Christian ground. He must see in history but one lesson, one truth. Down through the ages and generations he must be able to trace but one line, and along this line must be the truth, and out of it error. The teacher of history is this earth and world of ours; but to the professor Christ must be the central figure around which all clusters. The aim of historical life must be the erection of the kingdom of God on earth and the salvation of men. The history of the Decline and Fall of the Roman Empire, by Gibbon, with its many excellencies, with its vast erudition, with its attractive and imposing rhetoric, lacks the truly historic spirit, tainted as it is by Gibbon's religious skepticism, which paralyzes the whole. The reader feels that in spite of the pomp and panorama he must look elsewhere for information of the true cause of that decline and fall. The lesson, "Righteousness exalteth a nation," is here missing, and the scenic representation of the period is not a substitute for it. With a professor with such a religious view point the question of a text-book with a bias tendency will easily settle itself.

But it is incumbent upon the college authorities to exclude from the class room any text-book of history which might endanger the mind of the student or impede his progress in the right direction. * * *

THE TEACHING OF ENGLISH IN COLLEGE.

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College education is in its scope not specific, but general. It trains not for a particular vocation, but for all vocations, and aims to make man wiser, nobler, and better, and to lay the foundation for a broad culture which will advantage man in whatsoever sphere his duties may lie. With these ends no branch of learning is in so full harmony as the language studies. Properly taught, not only do they serve as discipline for the mind; but, involving as they do an acquaintance with the thoughts and deeds of men, they make for the widest knowledge. Language is as intimately connected with reason as breathing is with living, and is the outward manifestation of the inner life of the soul. Hence, in all true courses of general instruction to it is given the most prominent place.

Of the relative value of foreign languages, whether dead or living, there may be some question; but of the vital importance of the mother tongue there can be no doubt. "If a gentleman is to study any language," says Locke, "it ought to be that of his own country;" and surely English, regarded merely as a medium of communication, is not unworthy of deepest consideration.

From its composite character it has a unique interest. The simplest means to an end is the best, and that grammatical simplicity toward which all languages tend, English achieved, almost at once, by a political change, which, at the same time, was a prime factor in our wealth of words. Simple in its structure, and combining some of the warmth and grace of the South with the rugged strength of the North—rich, as its literature clearly shows, in expressiveness of the nicest shades of thought and feeling—English is a fit instrument of speech for those

peoples who, by their "energy and determination," are gradually making it a "world language."

It is not, however, by its excellence as a tool that English appeals to most of us. Its chief claim to preeminence in our college course lies in this, that it is the tool that we must use—our native speech. By it impression is made upon our minds and expression given to them. In it we feel and think; by it we act. Upon a knowledge of English the rest of education largely depends, because through it must come the greater part of our information and instruction. Without a thorough acquaintance with it almost all other learning is vain; for knowledge, like money, is useful only when circulated, and it is by means of English that we must pay our tribute to the store of the world's wisdom. It is the one study that is applied in all walks of life, the one that is most needed for the highest success, and the one, therefore, that demands from educators the greatest attention.

While the supreme importance of the mother tongue is generally recognized, it can hardly be said that the actual teaching has been in accord with such recognition. Familiarity with the subject has bred carelessness in both teacher and pupil; and from this, as well as from a too great dependence on the benefits accruing from the study of the classics, the teaching of English has suffered. It is not so long since a candidate for admission to the larger colleges in the country displayed, by his ability to translate foreign tongues, enough knowledge of his own language for entrance, and preparatory courses in English consisted of only some desultory composition work. That the study of other languages, and in a lesser degree all the branches taught, are aids in developing and strengthening the power of expression is undeniable; but that this preparation was insufficient for the best results is evidenced by the more recent requirements, which have done much to quicken interest in English in secondary schools.

There yet remains much to be done, and especially among us. In any course in which the time given to it is less by almost one-half than the time given to another language, English can not be considered the principal subject.

There is, moreover, in the teaching of English another fault which hinders true progress. Too often the real intent of the instruction is lost sight of, each particular branch is taught for itself, and that which is a means becomes an end. The primary object is not to know, but to do; it is not science, it is art. Viewed in this light, the study takes on an attractiveness that adds zest to its pursuit. Science is truth, but cold, hard, matter-of-fact truth; art is not less truth, but it is truth warm and rich, appealing by its beauty. The best interests of the student are served only when it is never forgotten that the aim is practice, but not alone that practice whose success is measured by mere material gain. If the end of education were to insure our daily bread, all instruction should be specific. But, "Not by bread alone doth man live, but by every word that proceedeth from the mouth of God." God speaks through man, and for us, in English. The chief purpose of the study, then—to be remembered, no matter what particular branch is pursued—is that man may perfect himself as a mouthpiece for God, and so, with most effect, give to his fellow-men his individual gospel, howsoever lowly, of truth and beauty and goodness.

The other object of the study of English—the mastering of its literature—is implied in the first. The true motive in this is not the empty one of art for art's sake, but, rather, art for the sake of developing soul power. By understanding and appreciating what is noble, man becomes noble; and the literature of a language, the treasury of the exalted thought of the past, the richest inheritance of the present—is man's noblest inspiration. Through it, more than through aught else save religion, are nourished those high ideals without which the soul languishes and dies; and, rethinking, its lofty thought not only communicates something of the wisdom that it contains, but stimulates into activity whatever there

may be of original greatness. Besides it is through the literature that the language must be learned and self-expression taught.

Training in English, then, includes the study of the language in itself; the study of the principles that underlie effective expression, with continual application of these in practice, and the study of the literature. All these, it is true, may be cultivated without a teacher. There are those who have an innate taste for words and literary effects; and genius may supply not only the grand conception, but the laws for artistic execution. But such natures are rare; the many must follow a leader into light. Even genius must serve his apprenticeship, and better results are obtained when this is done under judicious direction. The instruction in our colleges should supply the necessary guidance, and this instruction should be systematically progressive and free from the dogmatism that dwarfs originality.

In arranging a course of study it is well to bear in mind that college education has its limitations. It does not make finished scholars. What has been learned is but a preparation for knowledge. Sometimes courses, possibly only of imperfect realization, are evolved; and in the endeavor to do too much nothing is done well. This is true in particular branches, as well as in the whole course. Far better is it to teach fundamentals well than to attempt a wide range, which can lead but to shallowness and mental dissipation; and English teaching will gain more from thorough instruction in the principles of composition and earnest study of a few masterpieces than from an effort to impart a knowledge of the whole field of its letters and of comparative literature. If the foundation is good something may safely be left to later life, or to still higher instruction.

It is now generally agreed that before entering college a student should have been taught to express himself correctly, and with a degree of efficiency, and, to this end, should have made some study of literature. The discipline necessary for this is afforded by our preparatory departments, which, for us, take the place of the secondary or higher school. This early training should lean as much as possible to the constructive side, and be occupied with the building up of pure, effective sentences, and the uniting of these into paragraphs. It is, indeed, inadvisable to neglect entirely the critical view; but the acumen of the student preparing for college is still undeveloped, and a forced growth of it too often induces unintelligent repetition of secondhand judgments and kills all individual power. No further criticism should be expected than that which may proceed from the pupil's own insight and the application of what he has already learned. A practical three-year preparatory course shaped upon such ideas might be made to consist of, first, sentence structure from the standpoint of grammar; second, sentence structure from the standpoint of rhetoric, and third, paragraph structure.

With the instruction in these years appropriate works of literature should be studied and constant compositions exacted.

English grammar, with which the first year's work is concerned, has been rendered almost ineffectual by the character of its teaching. Few are they who can look back with satisfaction to the instruction received in this branch, and the reason for this is not hard to find. The true grammarian is not he who makes rules, but he who, from the usage of a people, discovers the laws of the common speech with a view of imparting a knowledge of correct expression. All distinctions of words, all rules of syntax, that do not tend to this end are worse than useless, inasmuch as they serve only to confuse the mind and waste intellectual power. Yet English, simple enough in its structure to almost justify Richard Grant White's "grammarless tongue," has, through its grammarians, been so imposed upon by Latin syntax that a study which can and should be made both pleasant and profitable has become a subject for abuse from even cultured men. Much time is spent in loading the memory with technical definitions and princi-

ples which have little or no bearing on the vernacular; while little practice in the actual use of the language is given. If the teaching were confined to the structural peculiarities of English, instead of being employed upon what is almost a science of grammar, incomprehensible to those forced to learn it, less difficulty and more benefit would ensue.

The province of grammar is the sentence; with words by themselves it does not deal. The true method of teaching it, then, in a language like English, which is nearly free from inflectional perplexities, is analytical. But by analysis must not be understood the simple naming of the kind of sentence, with the subject and predicate. The word groups should be thoroughly taken apart and, from the functions that they perform in the sentence, classified into parts of speech, their accidents noted, and the laws of their relation derived. Single words need little attention, except those of transition and connection, upon which, because of the lack of terminations, pure English construction so much depends. In this way grammar may be taught easily and logically, and it will be found of the greatest help in securing clearness, the foremost quality of literary style. Moreover, for the value of this method as an aid to the pursuit of other tongues, there is the authority of the late Professor Whitney, who says: "Give me a man who can, with full intelligence, take to pieces an English sentence, brief and not too complicated even, and I will welcome him as better prepared for further study in other languages than if he had read both *Cæsar* and *Virgil*, and could parse them in the routine style in which they are often parsed."

Presuming on the knowledge that a student should have obtained before he begins his immediate preparations for college, one year is ample for mastering grammar, and the second year may be devoted to the teaching of clear, energetic and graceful sentences. This will involve the study of words and their arrangement, with a view to the effect to be produced, and will include an investigation of figurative language. To cover in so limited a time the whole ground comprised herein is manifestly impossible; all the years of education are to some degree busied with this. Few, however will deny the advisability of forming early habits of exact expression, for these beget habits of exact thought. Accordingly, especial attention should be given to the instilling of an appreciation for words, and a precise understanding of them, not indeed for their own sake, but for the sake of their effective combination. Not too soon can the pupil be taught to meditate on the words that he meets, and to realize that they are live forces for good or evil; not too soon can his mind be opened to the depth and richness of their wisdom and poetry, and to their potency in awakening intellect and emotion.

What words are to the sentence, the sentence is to the paragraph. Separate words may call up a wealth of association, but until combined they have no cogency in the world of thought. So detached sentences, no matter how beautiful, are of small moment until united in continued discourse. To give unity and symmetry to discourse, to have all the parts coherent and orderly, is for all good writing the first requisite, applying with equal force to sentence, paragraph, and whole composition. But the sentence exhibits these qualities in so simple a form as to offer little material for successful study, while to study them from whole compositions is too complicated a process for immature minds. For early teaching, therefore, the paragraph becomes the easiest and most natural unit of discourse; and for this reason it is made the subject of the third year's instruction. In the perfection of the paragraph and its sequence lies the merit of the entire work, and he who has overcome the difficulties of the one will be well prepared to cope with those of the other.

The literature which should have a place in the curriculum of these years ought to be chosen in the light of the pupil's capacity and needs. Ordinarily by neither

experience nor education is he fitted to grasp firmly the meaning of the great masters who have sounded the depths of the human soul, and authors like Shakespeare or Milton, whose appeal lies outside his intellectual plane, become to him bugbears of class routine. Compulsory study of masterpieces the beauty of which he but dimly apprehends puts him in the double danger of imbibing for these a distaste which is hardly overcome by later cultivation and of relying so much on the opinions of others as to form no habit of independent criticism. Furthermore, since the early teaching is mainly constructive, the literary studies should illustrate as much as possible present usage, and should be drawn from periods as near to the student as is consistent with the best results. There is no dearth of good literature, which is recent enough for this purpose and well adapted for higher standards, and from which may be taken the material for class work. But not so much upon what is recited in class as upon a wide acquaintance with the best thought does knowledge of English depend, and to inculcate a habit of reading with taste and judgment should be one of the principal objects of the teacher. For this reason additional authors, who for lack of time can not be subjected to closer scrutiny, should be selected for careful reading as a basis for composition work.

To attempt to teach an art without continual practice in it is an obvious absurdity, and above all else for the successful study of English is the necessity of frequent composing. But for true progress writing must undergo careful and competent revision, for otherwise what is the best means of fostering and making permanent the power of good expression becomes an equally strong way of fixing error. This revision is the teacher's task—a task often burdensome, and always to the conscientious teacher full of fear. The danger of imposing too many restrictions, of curbing instead of guiding individuality, is a grave one, and a realization that English, being a living language, can not be corrected upon the same set of principles as Latin or Greek, must be ever present. To have full effect, too, the corrections should not be made outright, but should be indicated by signs which the writer understands and from which he himself may revise and transcribe his work. From this and from classroom criticism, which avails much if it be not so harsh as to discourage effort, faults and merits are impressed upon the mind and the habit of correctness engendered. For the preparatory years the qualities to be sought are originality and simplicity, and the themes, which ought to be assigned not less than once a week, should be determinate in character and within the range of the pupil's experience.

Such a preparatory course as the one outlined is not difficult of attainment, and he who can give evidence of having followed it successfully will be not less well grounded than he would be had he prepared especially to meet the modern requirements for entrance to college. He will have learned at least the primary essentials of good writing, and will have developed sufficient critical power to enable him to begin hopefully his higher education. This, in English, can not transcend rhetoric and literature, for these two include all that is to be learned. They go hand in hand, the one demanding the other, but for advantage in teaching the years of college instruction may be divided between them, making rhetoric the particular study of the first and the last year and literature that of the intermediate ones.

The teaching of the first year should be a far-reaching but not too deep exposition of the laws of artistic writing. Its aim is to equip the student for a critical study of the great authors, that he may himself, "under the influence, but not in imitation, of these models," give utterance to his own thought. From the very beginning he should be treated as an intelligent reasoner. Brought to understand that rhetorical rules do not take their authority from those who have conformed to them, but from a source above and beyond this and inherent in human nature—that they are not mere arbitrary inventions, but derivations from immutable principles, true at all times and for all peoples—he will find a fascination in his task

and take delight in discovering their application for himself. It is the knowing of the wherefore that makes the rule impressive—that informs with vital interest what would otherwise be but a dull and soon-forgotten adjunct to the class room.

When a student enters college he should be far enough advanced to follow in rhetoric the natural order of study. His first instruction then will be in the process of invention. This should consist in a drilling in the analysis of subjects and in the logical arrangement in a framework of the thoughts arising under them, as well as in the amplification of these thoughts in description, narration, exposition, and argumentation. Next comes the discussion of the qualities of style, and this can be only an extension and a full explanation of what he has already been taught. To be complete this course must include some consideration, necessarily brief, of the functions and technique of the principal prose forms and of the nature and elements of poetry. The necessity and importance of this training should need no urging. The first year of college ought to lay the foundation for both the critical and constructive work of the subsequent years, and this foundation can be had in no other way than through a knowledge of the principles of rhetoric, which furnishes the student with the theory of his practice.

Literature, the study of which for both illustration and inspiration must accompany the English instruction of every year, is of too great consequence to be always relegated to a secondary place. From it alone a practical knowledge of the language could be obtained, and the whole value of the theoretical discipline is derived from the accuracy with which the maxims are induced from an investigation of the greatest literary efforts and from the compactness with which they are presented. But the source is open to all; and while a lifetime is not long enough to know it in its entirety, surely college education ought to afford to its clients such an introduction to literature and such an acquaintance with it as will later lead to an intimate friendship with good books, one of life's greatest joys and blessings. For this reason two years may wisely be devoted especially to this study, but not to the history of the art and the biography of the writers.

The teaching of general histories of English literature is a valuable example of the failure of an attempt to do too much. These books are encyclopedic in their nature, and encyclopedias are poor text-books. The advantages which they may possess of presenting a bird's-eye view of the whole vast field of letters and of being guidebooks for courses of reading are, if the teaching is confined to them, more than offset by the superficiality of the information imparted and by the habit of dependence which their criticism creates. Except in a few rare instances, even their influence as guides is lost, for the memory, laden with a mass of names and dates and facts which have little appeal to the intellect or to the heart, soon relieves itself in forgetfulness. These books are not literature, and apart from the doubtful value of their biographies and their disinterestedness their worth by themselves in teaching literature is hardly greater than would be a publisher's catalogue, containing the usual press notice advertisements of his wares. It is to be remembered, moreover, that it is not a habit of reading which is to be cultivated, but a habit of reading with taste and judgment. There is no need of implanting the former. We are a nation of readers, but much of the present-day literature, which has a vogue even among college students and graduates, is a species of mental food proper only for the weak-minded. The antidote for this is to be found in a critical examination of masterpieces that will awaken in the student's soul a love not satisfied with less than the highest beauty.

The best way to study literature, then, seems to be in the works themselves. Where there is so much room for choice there is need of the nicest care in choosing. Not all the works of one great author should be taken, for this would give too limited a view, but as many single works of representative writers should be selected as can be assimilated within the allotted time. These should be examined in the light of the time and life of the author, about whom may be grouped

the other leaders of his period, and, for this grouping, a history of English literature might make a convenient reference book. There is, too, an advantage in tracing the progress of modern English letters from their beginning, in the fourteenth century, to the present time, and there is no valid reason why this could not be accomplished within two years. Even in one year, by making a selection of one prose and one poetic work from each of the different periods, the study could be brought down to the nineteenth century, and thus leave the whole of the second year for the study of the literature which is nearest to the student in point of time. Such a course is not proposed as the best possible one in literature, but it has in its favor that it will give, from actual study of masterpieces, an idea of the history of English letters; that it will furnish the student with a wide field from which to suit his own taste; and that it will offer inducements to further study in the different periods. The method of teaching should not be mere lectures by the professor. These may be entertaining, but they are not education. The student should be taught to analyze the works and to apply, in criticism, what he has learned of the principles of artistic composition. There is, of course, a danger that this laboratory method may be carried too far and the life of literature lost in its dissection, but there is no system of teaching not liable to abuse. Something must be left to the judgment of the teacher.

To the last year of college is again assigned the study of rhetoric, but such a deeper investigation as may be termed philosophic. This will mean the deduction of the laws from the primal principle of beauty from which they flow, and will involve an extended discussion of taste, imagination, and beauty itself, together with style and the literary forms. A proper conception of these demands all the knowledge to be obtained from the student's previous instruction. Moreover, his reasoning power, hitherto insufficient for a complete understanding of what rhetoric implies, will, by this time, have been so developed and strengthened by his formal study of logic and his general training as to enable him to comprehend something of the force of the æsthetic truths that underlie the art. The teaching may be best accomplished by the lecture system, and this will prepare the way for university methods, but, that it may not degenerate into mere entertainment, there should be at least weekly recitations from the questions, submitted beforehand, upon the matter of the lectures and of the parallel reading which must attend them. Instructions of this kind will not take away from the philosophical character of the final year's work; it can be made a summary of the conclusions to be induced from the whole range of English teaching and will lead to the broadest culture.

In the course of English instruction thus far suggested no provision has been made for philological study beyond what is implied in the teaching of words and literature. The student's time in our system of education is so occupied that, without a curtailment of some of the branches, no very deep knowledge of philology can be given, and this is not so necessary as to justify a change. But while this deeper knowledge is not essential, and may be better left to the post-graduate work, an acquaintance with the sources and developments of English is of too great benefit to be neglected. The value of Latin, whence is the origin of so many of our words, is acknowledged by all; few of us, however, seem to set any store upon a knowledge of Anglo-Saxon. Yet it is upon the Saxon foundation that the Latin superstructure is built, and no extensive training in English can be complete without its cultivation. It accounts for most of our idioms, and gives a deeper insight into the meaning of those words that are the bone and sinew of our speech. It has, too, all the disciplinary advantage of an inflected language, and possesses a literature which, if not so highly finished as the classics, is none the less a true record of the people's thought and feelings. There should be, then, some place for it in our curriculum; and if, as has been deemed wise, the preparatory course is to be lengthened, old English might as well be made the subject of

the fourth year's instruction. It can not be considered too difficult for those who have already made some progress in Latin and Greek, and if studied early, the information obtained from it may be applied and strengthened in the later teaching. Middle English, too, ought to demand some attention, and might have a part in the years devoted to literature. In this way the student could obtain a knowledge of the origin and history of his language, and this would prove not only interesting in itself and broadening in its influence, but useful in his practice.

But no matter what the course or what the method of teaching in English, the best results are due to the teacher himself. He is the living voice; he is more than the text. From the very nature and importance of his subject he has a higher privilege and greater responsibilities than most teachers. He can make the study a dry, lifeless task, or he can inform it with a vitality that will effect even more than is demanded. Upon the atmosphere that he creates, more than upon all the rest of the college teaching, depend individuality and good taste, which is not only an æsthetic but a moral faculty. One of the great objects of his work is to arouse such an interest in the language and its literature as will lead to further study, and to impart this interest he must have it himself. College education is not the end of English training, nor does it produce eloquent writers. "To acquire a few tongues is the labor of a few years, to be eloquent in one is the labor of a life;" and this eloquence flows more from a God-given source than from man's instruction. But while great masters of style are not made by teaching alone, a student, unless he is so invincibly ignorant as to preclude all possibility of his ever graduating, can and should be taught to express himself in idiomatic, graceful English, adequate to his thought, and to appreciate and to love the ideal beauty of which noble literature is the exponent.

DISCUSSION.

Taking up the discussion of this paper, Father Tracy, of Niagara, said: "There was allusion made to the necessity of critical study and examination of the masterpieces of the language. That is as it ought to be, and no course in English is complete without it. The point I wish to make is this: We are giving an education not only in English, but we are giving an education in English to Catholic children. For a matter of fact, we seem to be casting the minds of our children, from a literary point of view, in a Protestant mold. This is obviated only by extra work on the part of the teacher in entering into detailed explanations which will minimize the harm that we know non-Catholic works would do. The literary texts are taken from the great masters, such as Wordsworth, Browning, Macaulay, Longfellow, Hawthorne, and Whittier. The nobility of mind in the great geniuses reduces any harm that might otherwise be attached to their works to a minimum. Not so the authors of less note. They have done a benefit to humanity at large, but there must be discrimination if we do not wish to neutralize our efforts at Catholic teaching. Now we have Newman, we have Manning, we have Vaughn, we have Ward, we have Brownson, we have Spalding. We have a host of writers who are without the slightest doubt equal, perfectly equal, from a literary point of view, and superior in the domain of thought to many whose texts are placed before our pupils. Why can we not give to our own the attention and the respect that we are according through the publishing houses to the non-Catholic writers? If the publishers know that we want a particular class of work, they will very willingly secure it for us.

Rev. Father Cassilly, of Chicago, voiced the gratitude of the delegates to Professor Ryan for giving them such an able paper, and thought the remarks of Father Tracy very appropriate also. One point which he did not like to have pass without notice, however, was the secondary place given to grammar, which he held to be one of the essentials to develop accuracy of thought, in which men of the present day are so deficient. Grammar should be taught thoroughly and scientifically, especially in the academic grades.

Professor Ryan replied that English grammar suffers from the manner in which it is taught, and from its text-books—in the technical definitions and principles which are imposed upon it by foreign languages, and gave several illustrations of his meaning. He took the position that a boy can easily be taught all the English grammar he needs in one year—not, however, the science of grammar.

Rev. Father Bradley, of Atchison, disagreed with Professor Ryan in regard to divorcing the English grammar from the grammar of the other languages, and believed there should be a comparative study of languages; that it is impossible for the young student to understand English grammar without understanding Latin grammar or some other foreign tongue; that the modern way of eliminating everything from the English grammar and reducing it down to the ordinary language lessons as we have it to-day is wrong and detrimental to the best interests and a thorough understanding of English grammar. In reference to literature, the same objection to the study of the text-book in literature presents itself as in the study of history, and the same method, adverted to by Father Vincent, of studying history, viz, by groups, might be employed for studying literature; let the principal author of a period represent the period, and around this author group all the lesser portraits. Another point which Father Bradley considered very essential in the thorough study of literature was the study of the history of the times in which the authors lived, since it is impossible to appreciate the conditions of literature of certain periods without understanding the history of those periods. While English is undoubtedly one of the principal studies of the classical course, and should receive the principal attention, he did not consider it necessary to give it the same number of hours as we do to Latin, for the reason that private study can accomplish a great deal more in English than it would in the case of young boys studying Latin.

In this connection Monsignor Conaty said that one of the most important questions in the college curriculum is this very study of English, and dwelt at some length on the marked deficiency in English of students entering the university department. "They have a knowledge of authors oftentimes," he said, "without a knowledge of the author's works, and in this there seems to be a defective foundation. This is the fault of the college, and may also be traced beyond the college to be the fault of the preparatory school; but it is really the fault of the teaching of English, to which sufficient attention is not given; oftentimes the attention is more in the catalogue than it is in the working power of the college. And it seems to me, as a college conference we have reason to study fundamentally the question of the teaching of English in our college curriculum, for as gentlemen—finished scholars from college—we are oftentimes judged by our knowledge of our own language, and it is hard for us to know other languages and to acquire a reputation in other languages when we are defective in our own, especially in the history of our own literature or in the knowledge of the great authors that have made literature. This is the feeling of the universities, and it certainly is the feeling that expresses itself in our own university."

EDUCATIONAL LEGISLATION IN THE UNITED STATES.

A paper on this subject was read by Rev. James P. Fagan, S. J., vice-president of Georgetown University, District of Columbia. On account of its length this paper was not printed in the report of the conference, but the following discussion, to which it gave rise, is given:

Father Burns said he was sure the conference was profoundly grateful to Father Fagan for the keen-sighted, exhaustive, scholarly exposition he had given of the educational legislation going on about us, and, summarizing the facts presented by Father Fagan concerning the growth of the educational system of secular schools and colleges, thought we might profit by the experience of those who have had charge of public education. That is precisely the great question to-day—the systematization of all Catholic education—and he suggested the consideration as to whether the foundation or the conversion of this conference into a joint association of secondary Catholic schools and colleges would not be a most practical and most easy step in this direction. Such an association might consist, as in the National Educational Association, of sections—a section of higher education, a section of secondary-school education—which might hold sessions simultaneously.

Father Dowling said: "It seems to me the golden thread running through the discourse of the paper of Father Fagan amounts practically to this: We are convinced that we take the right and the proper view of education; that it is the only reasonable view to take—the one which requires religion to go hand in hand with the acquisition of secular knowledge. We have not as yet been able to impress that upon the American public, and the question arises how are we to reach that desired end? Certainly we count for comparatively little in the educational field,

and it may be it is not owing to any prejudice against us or our cause, but to want of the proper presentation of ourselves and our principles and our ideas. I have a great respect for the innate love of justice and fair play of the American people, and that we do not get fair play I can not believe is owing to anything else except our indifference. Now, it seems to me that we have not, up to the present time, worked along the line of our American institutions successfully; we have not made use of the salient points of our system of government, and we ought to make use of every possible means and every possible occasion to put before the American people what we want. We do not come before them claiming any special privileges as Catholics. What we require is the rights we are entitled to as American citizens, and they are infringed upon, and we do not receive justice, not because we are Catholics, but because we are American citizens that have certain convictions that are interfered with by certain laws and legislation adopted. While we, as clergymen, can not enter into the field of politics, can not go and lobby in the legislatures, why do we not enlist the energies, the intelligence, and all the other good qualities the Catholic laity possesses? The layman represents the citizen; he represents the taxpayer; he represents the parent. To the American public the clergyman represents the church, and what has the church to do with our internal system of government? We can not make use of money in bringing about these results, but I think it is in our power to make use of fear. Now, we have back of us a population of about 12,000,000 of Catholics in America, but we have not yet found out the means we are to make use of for reaching the great American public, and having our ideas and principles set before them. Foremost among these I would mention the press. And why would it not be possible for us to hold our meetings at the same time as the great National Educational Association—get ourselves in touch with the thoughts and prejudices of our people—in order to influence them for good and prevent them from entertaining or considering the passage of laws that would be inimical to religion in any form?

Rev. Father Dolphin, of St. Paul, stated in this connection that Catholics in all parts of the country have too long been apologizing for their existence; that we ought to convince the great American Republic that we are a part of it; that the fair-mindedness of the people of this country would certainly make more concessions to us if we would come out a little more, as Father Dowling suggests, meet other institutions in their conventions, and show that we are really taking an active part in the affairs of the United States.

Rev. Father Higgins called attention to the first part of Father Fagan's paper, in which he speaks of the committees appointed by the National Educational Association, the reports of these committees, etc., and said that the latter constituted a literature that is very important to all of us; though they are not legislation, they have always pointed the way to legislation, they have foreshadowed the tendencies of the educational mind, they have shown, as it were, the direction of the stream. But a very striking feature of these reports is, they show that the state of mind in the educational world is a very restless, very unsettled, very unsatisfactory state, and the instability of that educational mind is known to the members of these committees, as evidenced by their varying opinions regarding the length of course to be given.

The right reverend chairman said that before leaving this question of educational legislation he thought it well to again emphasize what was said in the paper and by the different members of the conference; that it is important that everyone interested in education should be familiar with the trend of educational legislation; that there is no doubt at all as to a well-defined movement toward the destruction of the college, toward the absolute control of all education, and the destruction by that same method of private enterprise in education. While, as Father Higgins has said, there is a great uncertainty even in the minds of the men who are moving along those lines, there is no doubt at all as to the establishment of the high school as the feeder to the State education and as to the absolute requirement for all who desire to enter into the educational work of the State. There is no doubt as to the determination on the part of the universities to control all schedules of educational work. And we need to have our eyes thoroughly open to the fact that we are absolutely ignored in all those phases of educational work. No consideration whatever is directed toward the Catholic educational system for means of consultation in any matter of education, but there is always a spirit of opposition to everything that bears the name of Catholic education. There is the difficulty of being recognized as conforming in any way whatever to the requisites for admission to the different opportunities that are offered in the way of education (illustrating this by the existing conditions in Massachusetts). "It is well for us to bear in mind all these things," Monsignor Conaty said, "and realize that the trend of educational legislation is against the private school, and it is against the private religious

school, and it is in particular against the Catholic educational system." And, as Father Dowling said so well, we are not here by sufferance. We are American citizens. We have our rights under the law, and we have our conscience obedient to God. We have our duty to perform in the work of education. We are doing it conscientiously and faithfully, notwithstanding all our difficulties, and we should not lose sight of the fact that we have rights as citizens as well as duties as Christians. And consequently it is well for us to have had that lesson read to us to-day of the educational legislation which brings close to us, as the result of Father Fagan's patient research, the trend of thought relative to the State authority in all matters of education. Therefore I wish to emphasize again, as the last word on this subject, the importance of being thoroughly familiar with all legislation that bears the name of educational, because it is something in which we are intensely interested, not only as Christians and Catholics, but as citizens.

REPORT OF COMMITTEE ON COLLEGE ENTRANCE REQUIREMENTS.

The committee on college entrance requirements made the following preliminary report, giving their views and conclusions, so far as they had been formulated:

To begin the college course and to pursue it successfully and profitably we think that it is necessary and sufficient that on leaving the preparatory school a young man should be able to stand the following tests:

1. In Latin he should be thoroughly grounded in grammar, including prosody. He should be able to read ordinary Latin prose at sight and to write Latin with some degree of ease. He should have seen the authors usually selected for beginners' work in the order in which they are usually read: Nepos, Cæsar, Cicero (Letters and in Catilinam), Phædrus, Ovid, and selections from Virgil's Georgics, with perhaps one book of the *Æneid*.

2. In Greek he should have a good knowledge of Greek grammar, including the rules for accents and simpler rules of prosody. He should be able to translate simple sentences, illustrating constructions, etc. He should have seen the usual Greek authors read in our preparatory department, beginning with the easy witticisms of Hierocles and the fables of *Æsop*, and going to the *Anabasis* and *Cyropædia*, St. Luke's Gospel, the Odes of Anacreon, and at the end perhaps taking one book of Homer.

3. In English. The study of English should be correlated with that of the classics, the aim being to secure that fluency and command of language, that accuracy in the use of words, that refinement of diction, which is invariably the reward of careful work in translating. The elements of rhetoric should be mastered—i. e., the principles regulating the use of words and the structure of sentences and paragraphs—and the principles of good prose style, etc. The student should, moreover, be made acquainted with what is best in our literature.

History should, as much as possible, be correlated with literary studies. In this way the student should be made acquainted with sacred and ancient history, Roman and Grecian history, the outlines of ecclesiastical history, and of the political history of his own country. Selected topics and periods of church history, therefore of English and American history, should be mastered, both for the sake of the facts and in the two higher classes for the sake of gradually training the student to observe and to note the relation of cause and effect, etc.

Modern languages should find a place in the curriculum, and on entering college the student should have a reading knowledge at least of French or of German, or of both.

In mathematics he should have finished algebra and geometry, plane and solid.

As regards the sciences, we believe that a certain amount of time should be set apart for physical geography, physiology, elementary biology, and perhaps elementary astronomy or physics and chemistry.

As to religion we need not go into details. It is clear that a young man entering college should be able to explain his belief and be able to give valid reasons for the faith that is in him.

We urge the importance of insisting on living teaching in religion, history, and English literature, not mere text-book work.

We would urge, too, the importance of oral work in Latin, so that the usage of the Latin tongue be not lost among us, seeing that Latin is the universal language of the church.

Your committee wishes to close by recommending that the matter of entrance requirements be not allowed to drop, but that a special committee be appointed to study the matter thoroughly and to report in detail on the study of English literature and of science in the preparatory school.

It was moved and seconded that the report of the committee be accepted, which motion was duly carried by a vote of the conference.

GREEK IN OUR CATHOLIC COLLEGES.

By REV. CANDIDUS EICHENLAUB, O. S. B.,

Of St. Bede's College, Peru, Ill.

In the question of Greek we happen on a subject of discussion which has been the cause of much dissension among the school men of our times. Already for some years there exists a faction that would sway public opinion toward rejecting the classics and accepting instead the more modern sciences as instruments of education. Judging from existing conditions, and seeing the strong efforts continually being made to introduce new courses into the schools, the conclusion lies patent that if the schools do not deteriorate to the level of manual-training schools, they will be productive of nothing more than polished seekers of material advancement, or progressively civilized but naturalistic sociologists. The tendency toward this kind of education is more noticeable in the common secondary school, although it has gained strong foothold elsewhere. For the secondary school, witness the report of the committee [of the National Educational Association] on college entrance, page 158: "The attention of educators has been of late repeatedly called to the truth that a four-years' course, consisting almost exclusively of classics and mathematics, with scant recognition of English literature, practically no modern history, and no physical or natural science, is a course so unsymmetrical as to be a monstrosity. The relation of the different educational institutions to each other ought to be such that a course preparatory to college will also be a course well adapted to fit the student for the later work of life and for social and civil duties in case he should fail to take a college course. It can not be claimed that the present classical course in high schools, constructed with reference to the classical course in colleges, makes any approximation to this result. The student who has completed a high-school course in preparation for the classical course in college has gained, not a tolerably complete and symmetrical education as far as it goes, but a wretched torso of an education. Nor is the exclusion of science injurious only to those whose studies are interrupted at the end of the high-school course. For those who enter college the ignoring of the study of nature in preceding years tends to unfit them for success in such studies. Their powers of observation and imagination of physical phenomena are well-nigh atrophied by disuse, and they have lost their native curiosity about the world in which they live. It would tend to correct this evil if a certain amount of science were required for admission to the classical course."

Notwithstanding this, the reaction setting in within the past few years gives

hopes for a wider appreciation of the classics. The same report quoted above, after enumerating the statistics, goes on to say: "From these figures it appears that the study of Latin in the last eight years has gained in the enrollment of pupils at a rate greater than that of any other high-school study. The total gain of 174 per cent is more than double the percentage of increase in the total enrollment of pupils in the schools. While the enrollment of pupils in Latin has thus increased 174 per cent, the increase of enrollment in Greek has been 94 per cent. In the same period the increase in the enrollment in physics has been only 79 per cent, and in chemistry only 65 per cent, a percentage smaller than that of the increase in the total enrollment in the schools. It is at least encouraging to the friends of classical study to notice that in 1897-98 almost one-half of all the pupils enrolled in the secondary schools (49.44 per cent) were engaged in the study of Latin. With this general increase of interest in Latin studies undoubtedly will come also a fuller recognition of the importance of Greek as an educational instrument. In the next decade an even more rapid increase in the enrollment of students in Greek may be expected than the very promising one of 94 per cent reported for the period covered by the table."

To what extent the Catholic schools have suffered under the influence of the secular sentiment need not now be investigated. We do know, however, that in many instances, both in matter and in manner, Greek has not received attention commensurate with its educational value. How many of all our college graduates do we ever meet who will admit of having profited by their course in Greek, or who have attempted, after completing the course, to avail themselves of their knowledge for further improvement? If these facts be conceded, might not the educators as well agree that the opportunity is ripe to debate whether Greek is of sufficient importance to retain it in the college curriculum at all? But, surely, for Catholic educators there can be no question of dropping this study from the curriculum. The meeting of this venerable body here to-day betokens rather an intention toward a readjustment of this branch, giving it its proper position and bringing the method of teaching it up to a uniform standard. Now, these points may not be solved except with reference to the educational value of Greek.

Let it be assumed that with Greek, as with any other branch of study, its value in the curriculum must be determined by its own intrinsic worth, as well as relative superiority to other studies. In the case of Greek the criteria establishing its superiority are: (1) The supremacy of this language as a vehicle of thought; (2) The fact that it offers the best literary productions of all ages; (3) Its excellence as a means of training the mind to comprehensive intellection, accuracy of reasoning, and nicety of expression; (4) That it has been made so important a factor in transmitting to man the Divine message of eternal truth and salvation.

And truly Greek is easily the peer among languages, the perfection of its structure, responding with fullness of harmonious flow to every movement of thought. The wealth of its vocabulary and the rich variety of its forms are unparalleled for giving appropriate expression to any conception of the mind, be it of concrete form or motion, with its attendant mode and vesture, or be it abstract (and immaterial) ideality, or sentiment and passion in the various degrees of tenderness or power. How superbly flexible and expressive to eye and imagination alike are the groupings of terms with their modifications, according as they are arranged to parade apart for emphasis, or are united in closed phalanx to lend strength to a leading idea! Still more, beside the color of moods and numbers of time, there is also the harmony of sound, wherein a discordant touch is scarce allowed to mar the pleasing tones. Greek, indeed, is a language than which none is more fittingly appropriate for instrumentation of human thought.

Well, too, have those master minds of cultured Greece employed the language to mold the edifice of their sublime conceptions. Never were passion and pur-

poses of mortals expressed with truer reality and more perfect taste and polished execution than in the epics of Homer. Demosthenes, in his love for country and his people, furnishes those imperishable models of oratory which, by their faithfulness to objective reasoning, could sway the people contrary even to their meanest inclinations. But why enlarge on the merits of these great men and their works; why speak singly of a Pericles, Aristophanes, Plato, Aristotle, Thucydides, and so many others, while we know that throughout so many centuries the ablest talents have sought delight in the refinement of Grecian literature? The schools of all civilized countries never could demean themselves by slighting the artful grandeur of Greek speech. Where is the college to-day, unless existing for mere material advancement, that refuses to invite studious minds to sit at the models of Attic lore—models which we can not help but liken to those other works of theirs, viz, those plastic imitations of the ideal human form, made always to be admired, always and everywhere recognized as the standard pattern for unfolding genius?

Can we wonder, then, that a language possessing such ready material and perfected by such subtle intellects, is so eminently fit to training young minds to comprehensive intellection and accuracy of judgment? In truth, there is no better instrument to develop the various faculties of the mind. It is herein we find that Greek is so profitable a branch in the classroom. The facility of surrounding single words with their modifiers to convey an adequate expression of subject and object of thought with accompanying circumstance or ornament, the infinite ways of rendering verbal terms with modes and conditions, can not but open up a more comprehensive view to the imagination. The variety of uses to which the same roots of words are adaptable, whether occurring in their original and real sense, or transferred to a moral or abstract signification, compel the student to have regard for the context, and ever to subordinate his judgment of the signification of a term to the sense conveyed in the complete sentence. In a similar way must he use his judgment in determining the function of terms according to forms defined by etymological regulation. The continual exercise in testing the fitness of all must eventually produce the ability of accurate judgment which is the distinguishing mark between the sound thinker and the voluble talker.

However indifferently the Catholic educator may think of the advantages enumerated, there is one other which he can not ignore, namely, that the knowledge of Greek prepares the student for a more perfect acquaintance with the deposit of our holy religion. Especially must those who, by the reason of their higher education, are looked upon as exponents of truth be in position to make themselves conversant with the sources whence the supposed coryphæi of biblical criticism derive their misguided conclusions; and if our adhesion to Christianity is to be a "rationale obsequium," how can the teachers of it permit those whom they are educating to remain without the means of discriminating between distorted deductions and lawful explanations, based on the text of the language chosen to communicate to man so great a part of divine revelation.

Thus, then, must we draw the conclusion that the study of Greek in a course leading to higher education dare not be neglected, if indeed Catholic institutions would do themselves justice. For, taking the advantage pointed out collectively, there is no known discipline of such universal value as a means toward individual, as well as social, intellectual, and moral attainments. Of course, religion, the vernacular language, and Latin must claim priority in as far as they are of simple necessity or that they are the medium without which what is necessary could not be obtained. Greek, therefore, if taught in accordance with its value, would demand a full course of six years or at least five, supposing the conditions exceptionally good.

What part of this course is to be allotted to the secondary or preparatory school is the question which, I understand, is to be more specially discussed in this meeting. An adequate decision on this topic can not be given unless the twofold object of the secondary course receive due consideration. Now, undoubtedly the first aim ought to be development of the intellectual powers; the second, knowledge. And it is precisely herein so many schools are sadly deficient. We see this so clearly manifest in the prevalent tendency to cram the student with information by the introduction of numberless "ics" and "ologies," to the detriment of logical development. Well aware of the results so forcibly impressed on our minds, we can the better persuade ourselves to hold more steadfastly to the past and its methods, seeing they have stood the test of worlds and centuries, only that we be mindful to give later improvements fair trial and recognition. Development, then, is the first desideratum, and since Greek is a means exceedingly well adapted thereto, the method to be pursued in teaching it can not be purely that of grammar, or the natural, the pure, the phonetic, the psychological, or the reading method; but it must combine what is most serviceable in each in order to be conducive to an all-around training.

Moreover, the teacher should steadily aim to have regard for the mental operations. The first of these is that of apprehension, which is acquired not only by memorizing terms of the vocabulary, but more by close attention to the value of words and signs arising from their peculiar forms. This enlarges the power of observation and definite apprehension. The second operation naturally following upon the preceding is to find the relation of ideas and expressions, and, again, to distinguish them from each other according to the different functional value they have as parts of a simple unit of connected thought. This operation, in turn, increases the power of discernment, and must precede the third, which consists in tracing a whole period of reasoning, in arranging a series of judgments according to their coordinate and subordinate relations. This work tends to expand the grasp of the mind and to unify intellectual activity into a harmonious whole. More than this, a fourth operation, that of analyzing the various modes of expression, the disposition and grouping together of the leading ideas and judgments, with their accompanying modifications, leads directly to a comprehensive view, extending the power of intellectual vision. But superior to this is the fifth operation, wherein all mental activity is shown to be restricted to general laws, by means of which alone a language becomes the property of a nation or community. By close study of these laws, frequently so extensive in their generality, the mind is still further trained to intellectual expansion, being led to recognize an indefinite array of possibilities therein; and by again applying and seeing applied these laws in the concrete it learns to become accurate, and its judgment gradually becomes more definite in objective correctness. A proper regard being had for these operations, under a competent teacher, no one can fail to see that such training will be productive of solid education and such development as is inseparable from independent thought and rational judgment.

Though development must be the first aim in education, the acquisition of knowledge can by no means be neglected. The student of the secondary department should become acquainted with so much knowledge that his further progress be profitable. It will never do to have learned merely a set of forms and rules, with some notion of their use, nor will it do to know a compendious collection of words without understanding their function. In order to obtain an equable result the secondary course must have its own end, besides preparing merely for a university course. It ought to afford a good working knowledge of Greek, so that the student be in position to pursue intelligently and independently his reading of Greek, without stumbling against so many and difficult obstacles as to cause him to lay aside his books in despair.

It may therefore be considered as established that in the academic¹ course the student be trained to acquire an accurate knowledge of etymological forms, all principal rules of syntax, and a sufficiently extensive vocabulary. This directly implies an answer to the question, What should be exacted of a candidate presenting himself for entrance to the university? for it excludes mere questioning on time and quantity of matter seen and demands that the student, besides manifesting such intellectual development as will render him capable of undertaking profounder studies, will also give proof of knowledge sufficient as a foundation for easily assimilating its higher branches. If such is the general expression for the standard required, then the candidate must be able to read fluently and translate correctly any matter previously seen in the course completed; to parse and analyze, giving account of forms and constructions, and must be able, without too frequent recourse to dictionary or grammar, to handle intelligently such parts of the easier authors not studied beforehand, i. e., to read at sight.

Working on this fundamental standard, it is evident that the young student must already possess a good idea of the grammar of his own language, and be well versed in the knowledge of the value of terms and periods. And, if otherwise, he is not to be crowded with a superfluity of matter apt to overtask his assimilative powers; the study of Greek should be deferred to the second year after Latin has been completed. This practice the Catholic institutions in this country have almost uniformly adopted, and they seem the more inclined to wait till after the second year, finding it preferable to begin Latin as soon as the schoolboy has graduated from the elementary department.

How long a time thereafter, and under what best method the object of the Greek class may be attained, must be decided by the experience of observant teachers. Withal, there seems to be a divergence of opinion regarding the method of teaching Greek. With the variety of methods now in vogue, no precise regulation may seem feasible for allotting the time; nor does it even seem possible to introduce one and the same method as long as the teachers themselves are not equally equipped to perform duty on the same branch. Yet all are certain that there is a universal movement toward improvement. Let, therefore, the experienced outline a course, serving as a model for the perfection to be attained. An attempt at an outline is made in the following schedule:

Schedule for a three years' course (four hours per week); for day schools five hours per week.

First year: Grammar, including all to the verbs in "mi."

Exercises, accompanying each lesson in grammar; translating Greek into English, and English into Greek, from memory; toward the end of the year, memorizing small stories or fables, the difficult parts receiving extra explanation.

Second year: Grammar, repetition; from the verbs in "mi," through irregular verbs and the cases.

Prepositions.

Exercises, accompanying grammar same as above; translation ditto; Xenophon. Memorizing select passages.

Third year: Grammar, repetition of previous year; modes and tenses, etc. Grammar completed.

Exercises, Xenophon, Homer, a few chapters of Sacred Scripture, some Greek Father of the Church, preferably St. John Chrysostom.²

¹ Academic must here be taken as equivalent to secondary, or preparatory—i. e., that course offering adequate training for entering a first-class university course. This does not imply any change (to be made) in the collegiate course preceding the clerical seminary; for the arrangement of four years of Greek in classics, followed by a year or two in philosophy, is considered admirable.

² The reading of Homer, S. Scripture, etc., in this course is intended chiefly for training in Greek synthesis, and for acquiring a large vocabulary, which must be the foundation for a more extensive study of Greek literature later on.

N. B.—It may be remarked that the grammar to be used be Kuehner's, Buttmann's, or Spiess's, or some similar elementary grammar. To give a better view of the whole outline of grammar, the grammar and exercise book should be separate. It will be found very advantageous with students entering upon their course in Greek rather late, or students that are farther advanced in other branches, to give them an occasion of seeing the whole grammar with its principal features, and exercises corresponding, for a first year, which may serve for two years of the regular course.

Treated in such or a similar manner, the study of Greek, besides furnishing the student with desirable knowledge, will be a powerful aid in training the mind to facility in acquiring that definition of concept so essential for accurate reasoning, and give it, at the same time, that faculty of expansion wherewith it intuitively comprehends a variety of possibilities, of which it knows but one to be selected as the best and most fitting. This, then, must be the object of the Catholic teacher whose faith in the unchangeable truths of revelation and Christian philosophy is supreme, and who will not sacrifice quality of intellectual development, a part of true education, to a mass of confused information, the outgrowth of which is and can not be other than complacent self-sufficiency and opinionated sciolism. If, finally, the teacher acquaint the student with the reason and merits of the system he would conscientiously follow out, the student will not only readily become reconciled to an apparently difficult system, but also gradually take more delight in cooperating with his professor for obtaining results ending in solid satisfaction to both student and professor.

CHAPTER XIX.

EDUCATION IN GREAT BRITAIN AND IRELAND—1900-1901.

Great Britain and Ireland, constitutional monarchy; area, England and Wales, 58,186 square miles; population (estimated, 1899), 31,742,588; Scotland, 29,820 square miles; population (estimated, 1899), 4,281,850; Ireland, 32,583 square miles; population (estimated, 1896), 4,535,516.

Information on education in Great Britain in previous Reports.

Title of article.	Report of—	Pages.
Detailed view of the educational system in England.....	1888-89	78-111
Religious and moral training in public elementary schools, England and Wales.	1888-89	438-457
Brief view of the educational system, with current statistics.....	1889-90	237-248
Educational system of Scotland.....	1889-90	187-236
Elementary education in London and Paris.....	1889-90	263-280
Brief view of systems of England and Scotland, with current statistics and comparison with 1876 (England); (1880 Scotland).....	1890-91	125-134
Provisions for secondary and for technical instruction in Great Britain.....	1890-91	135-150
Educational system of Ireland.....	1890-91	151-164
Elementary education in Great Britain and Ireland, 1892.....	1891-92	97-104
Technical instruction in Great Britain.....	1891-92	105-137
Elementary education in Great Britain.....	1892-93	203-208
Religious instruction under the London school board.....	1892-93	208-218
Great Britain and Ireland, educational statistics and movements, 1893.....	1893-94	165-185
Educational systems of England and Scotland, with statistics and move- ments, 1893-94.....	1894-95	257-273
The English educational bill of 1896.....	1895-96	79-121
Education in Great Britain and Ireland, 1895-96, with detailed statements of the development of the English system.....	1895-96	123-135
Education in Great Britain and Ireland: Statistics, legislation, 1870-1897.....	1896-97	3-14
Elementary education in London.....	1896-97	15-27
Education in Great Britain and Ireland: Recent measures pertaining to the administration of the system; to the improvement of the teaching force; the extension of the curriculum—Proposals respecting secondary educa- tion—Universities and university colleges.....	1897-98	133-167
Brief conspectuses of the systems of elementary education in England, Wales, Scotland, and Ireland, with current and comparative statistics—Details of the current movements in England, with especial reference to recent leg- islation—Review of recent university movements.....	1898-99	3-65
Education in Great Britain and Ireland: Current statistics; statistical review, 1870-1899—Board of education; organization and scope—University move- ments.....	1899-1900	1167-1204

TOPICAL OUTLINE.

Statistical summary, 1900—Brief outlines of systems of education of England and Wales, Scotland and Ireland—Review of educational movements in England, 1900-1901: Measures respecting higher grade and evening schools; state of rural schools; development of board schools in the cities indicated by statistics of six typical cities, with citations from current reports—Detailed statistical tables, current and retrospective (England and Scotland)—Secondary education in England and in Scotland—Universities and university colleges: Statistics (including 1889-1900); new organizations in England; the royal commission on the state of university education in Ireland, paper by Judge O'Connor Morris.

Appended papers: (1) The Government Education Bill, by E. Lyulph Stanley; (2) A National System of Education, by Cloudesley Brereton.

Summary of current educational statistics—Great Britain and Ireland.

Sources of information.	Institutions.	Date of report.	Registered students or pupils.	Professors or teachers.	Expenditure.
	GREAT BRITAIN.				
	England and Wales.				
Statesman's Year Book, 1901.	Universities: ^a				
	Oxford (23 colleges).....	1900	^b 3,499	94	-----
	Cambridge (18 colleges).....	1900	^b 2,985	126	-----
	Durham (1 college).....	1900	170	20	-----
	London (2 affiliated colleges).....	1900	^c 2,313	204	-----
	University colleges (12).....	1900	^d 8,476	718	-----
	University colleges for women (4).....	1900	427	-----	-----
	Bedford College for Women.....	1900	183	32	-----
	Royal Holloway College for Women.....	1900	120	26	-----
	Technical: City and guilds of London (4 institutions).....	1900	^e 1,592	76	-----
Official report, 1900-1901.	Elementary day schools.....	1900	5,705,675	145,944	} \$60,531,609
	Night schools.....	1900	509,251	-----	
	Training colleges for elementary teachers.....	1900	5,776	-----	
	Scotland.				
Statesman's Year Book, 1901.	Universities:				
	Aberdeen (1 college).....	1900	732	58	-----
	Edinburgh (1 college).....	1900	2,754	107	-----
	Glasgow (1 college).....	1900	2,016	105	-----
	St. Andrew's (2 colleges).....	1900	264	23	-----
	Dundee University College.....	1900	^f 120	38	-----
	Glasgow Technical College.....	1900	^g 298	74	-----
Official report, 1900-1901.	Elementary day schools.....	1900	753,287	17,189	} 7,433,752
	High-grade schools.....	1900	3,271	-----	
	Night schools.....	1900	82,190	-----	
	Training colleges for elementary teachers.....	1900	1,250	-----	
	Ireland.				
Statesman's Year Book, 1901.	Universities:				
	Dublin (1 college).....	1900	1,100	54	-----
	Belfast, Queen's College.....	1900	311	26	-----
	Cork, Queen's College.....	1900	178	23	-----
	Galway, Queen's College.....	1900	91	23	-----
Official report, 1900-1901.	Elementary day schools.....	1900	^h 770,622	13,074	} 5,947,263
	Night schools.....	1899	2,182	-----	
	Training schools for elementary teachers.....	1899	877	-----	
	Great Britain and Ireland.				
	Science schools and classes.....	1900	167,280	-----	-----
	Art schools and classes.....	1900	125,291	-----	ⁱ 1,357,331

^a Owens College, Manchester; University College, Liverpool, and Yorkshire College, Leeds, are associated together as the Victoria University; and the Welsh colleges at Aberystwith, Bangor, and Cardiff as the University of Wales. A university, with which Mason College is incorporated, has been established at Birmingham.

^b Undergraduates. At Oxford in 1899 there were 856 matriculations; at Cambridge in 1900, 932.

^c Also 3,189 evening students.

^d Includes 1,125 evening students.

^e Includes 809 evening students.

^f Also 70 evening students.

^g Also 3,781 evening students.

^h Average enrollment.

ⁱ Grants by board of education.

BRIEF CONSPECTUS OF THE SYSTEM OF ELEMENTARY EDUCATION IN ENGLAND.

From the above table it will be seen that the public elementary schools of England enrolled 5,705,675 pupils in 1900. They were distributed in 20,117 schools under Government inspection, and maintained by the combined action of Government and local authorities. The total current expenditures, day and evening schools, reached the sum of \$60,500,000, of which the Government supplied 64 per cent and local sources 36 per cent.

The current expenditure for day schools only was \$58,538,923, equivalent to \$12.54 per capita of the average attendance, viz, 4,666,130. This number is 81.8 per cent of the enrollment.

Origin and essential features of the system.—The organized system of public elementary schools is based upon the education law of 1870, commonly known as the Forster law, from the name of its author. Subsequent laws have fortified and extended the system, but without changing at all its essential principles.

As early as 1833 Government had made an appropriation of \$100,000 for elementary schools under the management of religious societies. The policy was continued and developed from year to year, but with ever-growing evidence of the inadequacy of the effort to meet the needs of the people. By the law of 1870 Government assumed the responsibility of securing school provision for all children, and, without prejudice to the existing denominational schools, created a new local agency—school boards—for the establishment of elementary schools. These boards were to be elected by the taxpayers in each rural parish and municipality, as circumstances might demand, either upon local initiative or upon the order of the Government. The existing denominational schools were to be recognized as public elementary schools in the meaning of the law and were placed upon the same footing as the board schools with respect to the Government grant.

The law provided that board schools should be strictly nonsectarian, and by a "conscience clause" prohibited private schools from forcing religious instruction upon children whose parents should object to the same. No public grants are allowed for religious instruction. The law of 1870 also transferred to school boards the power previously exercised by prison authorities of contributing to the establishment and maintenance of industrial (reform) schools.

The denominational or "voluntary" schools, as they are termed, were excluded from a share in the local taxes upon which the boards might levy for the support of the board schools. The conditions for sharing in the Government grant, which are the same for both classes of schools, are set forth in annual regulations (codes). These regulations are sanctioned by Parliament and have the same force as the law. They relate to buildings, number and qualifications of teachers, course of study, and length of school year.

The total enrollment in 1900 (5,705,675) was distributed between the two classes of schools as follows: Voluntary or denominational schools, 53.3 per cent; board schools, 46.7 per cent. The current expenditure for the "voluntary" schools was met from Government grants, 78.2 per cent; from endowments, subscriptions, and fees, 21.8 per cent. The current expenditure for board schools was met from Government grants, 53 per cent; local taxes (rates) 45 per cent, and the small balance from fees and other local sources.

The central authority.—The Government grant, which forms the chief source of income, is administered by the board of education created in 1899 (replacing the education department created in 1865 to administer the grant to denominational schools).

The distribution of the grant since 1895 has been made principally on the basis of the average attendance in individual schools, the rate per capita being determined by the reports of the Government school inspectors. These comprise 12 chief inspectors, 107 inspectors, 45 subinspectors, and 152 inspectors' assistants, a special inspector of music, a directress of needlework, and an inspectress of cookery and laundry work. The experiment of appointing women to serve as subinspectors, first tried in 1896, has proved eminently successful.

Local authorities.—Apart from the requirements for sharing in the grant, local authorities, whether private managers or school boards, have large powers and great freedom in respect to the management of the schools.

The school districts, or areas for which a school board should be formed under the law, are the metropolis, every municipal borough excepting Oxford, and every parish not included in the former. The number of school boards in 1900 was 2,545, representing 69.5 per cent of the population. In districts having no school board, comprising at present 30.5 per cent of the population, school-attendance committees are appointed to enforce school attendance (law of 1876).

Free tuition.—The law of 1891 providing a special grant for all schools, whether board or voluntary, remitting fees, has had the effect of making elementary education practically free throughout the land. Of 20,117 schools on the list for inspection in 1900, it appears that 91 had refused the fee grant altogether, and 2,660 continued to receive such fees as the law allows (2,725 the year preceding). Of the total number of enrolled pupils, 88 per cent paid no fees whatever.

Teachers.—The teaching force in the day schools, numbering 143,379 (excluding 2,565 probationers), was composed as follows in 1900: Certificated teachers, 44.6 per cent of the total; assistant teachers, 22.6 per cent, and pupil teachers 20.5 per cent; additional women teachers, 12.3 per cent. The pupil teachers are regarded as teachers in training, and an additional grant is made to the school on their account.

The average annual salary of certificated teachers is, for men, \$635, as against \$457 in 1870, and, for women, \$425, as against \$279. For the training of teachers

there are 44 residential colleges attended, in 1899-90, by 4,085 students, and 16 day colleges, with 1,523 students. Of the former institutions 42 are denominational and 2 are private and undenominational. The day colleges, with two exceptions, are departments or annexes of university colleges. The training colleges are all under Government inspection and receive annual grants for "Queen's scholars," who are admitted upon proof of required attainments and who pledge themselves to adopt and follow the profession of teacher in a public elementary school or other specified schools. The expenditure for the residential colleges for 1898-99 was £210,786 (\$1,024,419), two-thirds of which was met by the Government grant. The expenditure for the day colleges was £47,459 (\$230,650), three-fourths of which was met by Government grants.

The superannuation law of 1898 provides for the retirement of teachers for age (65 years) or disability with an annual allowance. This allowance is made up partly by an annuity purchased by small sums—£3 for a man and £2 for a woman—deducted annually from each teacher's salary, and partly by a State pension calculated according to the years of actual service performed by the teacher.

Legislation since 1870.—The most important modifications of the system of elementary education introduced since the passage of the law of 1870, either by amending laws or by annual regulations having the force of law, are as follows:

Law of 1876, restricting the employment of children under 14 years of age and making it the statutory duty of every parent to cause his children to receive efficient elementary instruction in reading, writing, and arithmetic; also creating school-attendance committees in districts having no school boards. Law of 1880, obliging local educational authorities to make by-laws for the enforcement of compulsory school attendance. Annual regulations of 1875 and 1880, extending the list of optional or specific subjects and adding a seventh grade to the six already established, thereby laying the foundation for higher grade schools. Annual regulations 1882, introducing a merit grant, to be awarded upon the basis of average attendance.

Annual regulations, 1890, making important provision for teaching science and drawing, also providing for Government aid to day training colleges (normal schools).

Law of 1891, providing for an extra grant in lieu of fees at the rate of ten shillings per capita of average attendance for all schools remitting fees.

Laws of 1893, (1) making eleven years the minimum age for exemption from school attendance and requiring an examination in a grade not lower than the fourth for every child seeking exemption from school attendance; (2) authorizing school boards to make special provision for the elementary instruction of blind children and of deaf and dumb children.

Annual regulations, 1893, constituting evening schools as evening continuation schools. Annual regulations, 1895, substituting for the system of formal and individual examinations by the Government inspector two annual inspectorial visits, to be made without notice, and apportioning the Government grant on the basis of average attendance.

Law of 1897, providing a special grant for the benefit of "voluntary" (chiefly denominational) schools at the rate of 5 shillings per capita of average attendance; also authorizing the federation of voluntary schools and the allotment of the grant at the discretion of the governing bodies of the federations.

Laws of 1899, (1) defective and epileptic children's act "empowering local educational authorities, at their discretion, to establish special schools or classes for mentally or physically defective children and special boarding institutions for juvenile epileptics;" (2) law raising the minimum age for exemption from school attendance from eleven to twelve years; (3) creating a board of education to replace "the education department and the science and art department, providing also for the transfer to the new board of certain powers exercised by the charity commissioners with respect to educational trusts and endowments, and for the transfer to the board of the educational functions of the board of agriculture." Further, the law authorizes "a consultative committee, to be constituted by an order in council, consisting of persons qualified to represent the views of universities and other bodies interested in education for the purpose of framing, with the approval of the board of education, a register of teachers and of advising the board of education on any matter referred to them by the board." The law also authorizes the board "to inspect any school supplying secondary education and desiring to be so inspected." Thus a step has been taken toward unifying in some measure the agencies of secondary and of elementary education.

Law of 1900, extending the period of compulsory attendance.

Auxiliary legislation.—1889-1891. Technical instruction laws authorizing county councils to levy a tax not exceeding a penny in the pound for the support of technical schools.

1890. Local taxation, customs, and excise law, placing the surplus of the liquor duties at the disposal of county councils, with the privilege of applying the same to technical instruction.

BRIEF CONSPECTUS OF THE SYSTEM OF EDUCATION IN SCOTLAND.

The system of education in Scotland was organized by a law of 1872 on a basis similar to that of the English system as regards support from the public treasury and the Government inspection of schools. Scotland had, however, a system of public schools dating from a law of 1696 which required that a school be established in every parish. The country was thus prepared for a system of universal school boards as provided for by the law of 1872. The law differed also from the English law of 1870 in that, following the traditions of the old parish system, it made provision for both elementary and secondary schools. The latter did not share in the treasury grant, but by subsequent laws were allowed support from local taxes. Whereas compulsion has been gradually introduced into the English system, the Scotch law made education compulsory for all children between the ages of 5 and 13 (raised to 14 in 1883), or until a certificate of exemption should be secured. The standard or grade for exemption was made the fifth (law of 1878); the age for exemption is twelve (law of July, 1899).

A law just passed, 1901, strengthens the compulsory measures without, however, changing the age limits.

Religious instruction in the schools of Scotland was left to local authorities with the simple restriction of a conscience clause making the attendance of children at the religious exercises optional with the parents. A grant in lieu of fees (law of 1839) has had the effect of making the schools practically free schools.

In 1885 the Scotch education department arranged for the inspection of endowed and other secondary schools applying for the service. In 1888 the department established a leaving certificate for students who, on the completion of a course of secondary study, pass the certificate examination.

The number of secondary schools inviting inspection in 1900 was 93, of which 32 were higher class public schools, 25 endowed schools, and 36 private schools. The number of candidates for the leaving certificate in 1899 was 16,771; in 1888 it was 972.

A large number of university and professional authorities accept the certificate in lieu of such preliminary examinations as are held under their direction. Through the service of inspection and examination the secondary schools of Scotland have been brought into close relation with the education department.

Under the local taxation (customs and excise) act 1890 and other acts providing for the application of public funds to secondary and technical education, the local authorities expended for these purposes in 1900-1901 the sum of £67,656 (\$338,000).

SYSTEM OF NATIONAL EDUCATION IN IRELAND.

The system of national education in Ireland dates from 1831, when a board of commissioners for education was created by the Government. In 1845 the board was incorporated by royal charter, and in 1861 a supplemental charter was granted, under which 10 members must be Roman Catholics and 10 Protestants. The board is composed always of representative men, who adhere to the policy of strict impartiality in religious matters. The schools under the supervision and fostering care of the board are supported by State and local funds. They may be denominational schools (i. e., Roman Catholic or Protestant) or mixed, in respect to religion, but the rights of parents in the matter are strictly guarded by a conscience clause in the school regulations, which provides that no child be allowed to attend a religious exercise of a denomination other than his own, except upon the written request of the parent.

Grants in aid for the building of schoolhouses are allowed by the commissioners, but must be proportioned to the amount raised locally. The State pays also the larger proportion of the salaries for teachers, requiring a minimum annual augmentation from local funds of £12 (\$60). Altogether the State bears about 94 per cent of the annual expenditure for the schools.

To avoid religious complications the State provides the text-books for secular branches, which are issued at a small cost to the pupils.

For purposes of Government supervision the country is divided into 60 districts, which are grouped in 6 divisions, each in charge of a head inspector. Under these are 29 district inspectors, 7 unassigned inspectors, and 10 inspectors' assistants. Inspectors and their assistants are appointed upon examination testing their scholastic and professional qualifications.

Local civil authorities have no control over the schools. The local managers

of schools, who are generally clergymen, come into direct relations with the board of commissioners. They appoint and dismiss teachers and arrange the details of the school work. Of a total of 2,936 managers in 1899, four-fifths were clerical.

The commissioners have direct control of a special class of schools called "model schools," for which they provide the buildings.

"They are intended, as their name indicates, to afford models of the best methods of instruction and organization, and to serve as practice schools for students in training colleges or normal schools." These schools numbered 30 in 1899, with an enrollment of 9,615 day pupils, included in the enrollment given in Table I.

A compulsory school law was passed in 1892, but it has been imperfectly enforced, and Ireland still stands below the other divisions of the United Kingdom in respect to school attendance, as is shown by the most recent statistics. These give the following rates of attendance to enrollment:

	Per cent.
England	83.3
Wales	77.9
Scotland	83.7
Ireland	62

Convent and monastery schools afford a large part of the provision for elementary education, and receive, under certain conditions, aid from the Government.

The number of such schools fulfilling the conditions for aid reported in 1899 was 336, with an enrollment of 107,196 pupils.

For the training of teachers there are one national and four denominational normal schools, which receive grants in aid from the Government. There were 891 students in training in 1899. Provision for agricultural instruction is an important feature of the system. Instruction in the theory of agriculture is compulsory in all rural schools for boys in the fourth, fifth, and sixth classes, and optional for girls.

The commissioners maintain also two model agricultural schools, and in 1897 they reported 38 school farms in connection with elementary schools and 116 schools having school gardens attached.

An intermediate education board was established in 1878 for the examination of intermediate or secondary pupils. In 1899 the number of candidates for examination was 7,768 (5,726 boys and 2,042 girls), as compared with 9,073 in 1898 and 6,952 in 1881. There was paid to the managers of the schools the sum of \$365,000 on the results of the examination. The expenses of the board are met by a Government grant of £34,240 (in 1899) and local revenues amounting to £60,591, or a total of £94,831 (\$474,155).

In 1897-98 twelve local authorities in Ireland expended altogether £5,649 (\$28,245) on technical instruction, the money being granted out of rates (local taxes) under the "technical instruction acts."

REVIEW OF EDUCATIONAL MOVEMENTS IN ENGLAND IN 1900-1901.

MEASURES AFFECTING HIGHER GRADE BOARD SCHOOLS.

The most important events of the year pertaining to education in England grew out of judicial decisions affecting the higher grade board schools. These schools have been sanctioned by the annual regulations for elementary schools, which have authorized the teaching of advanced subjects and awarded special grants for the same, and they have been fostered by additional grants from the science and art department. The latter have been allowed upon the condition that certain equipments and faculties were furnished and have thus promoted the organization of higher grade schools distinguished as schools of science. The development of evening schools has followed somewhat the course of that of the higher grade day schools. They have ceased since 1893 to be merely elementary schools and have become continuation schools, chiefly for scientific and commercial training, and providing also for social recreation and improvement.

By the judicial decisions referred to above it was declared illegal for school boards to apply the funds derived from local taxes (rates) to the support of higher-grade schools or for the instruction of adults. As the aid to the advanced schools from the science and art department had been previously withdrawn, these deci-

sions virtually deprived the school boards of funds for the work. The particular case upon which the decision was rendered was that of the London school board, against which surcharges were brought by a municipal auditor (Mr. Cockerton) on account of expenditures incurred for instruction in subjects not recognized as elementary.¹

Upon an appeal to the courts the case was decided against the board. The effect of this decision, commonly known as the "Cockerton judgment," was thus defined by Sir John Gorst, vice-president of the education department:

The judgment does practically two things. First, it decided that school boards could not employ the fund procured by the school rate for giving instruction in any of their schools which was not elementary. It is quite true that the court did not, and probably could not, define the exact meaning of the word "elementary," but they intimated that the day school code of the board of education was what I think they called the high-water mark of elementary education. The second point decided was this: That school boards could not give any instruction of any kind whatever to persons who were not children. Again, the court did not define where childhood ceased; but the board of education had been advised, as the London school board appears to have been advised by its counsel, that it would not be safe to place the limit of childhood higher than 15.

The chief causes for the opposition thus suddenly developed to a work previously sanctioned by the Government appear to be, first, the fact that the school boards are gradually encroaching upon the domain of secondary education. The studies and the methods of the higher grade schools make it necessary indeed to consider them in any scheme for systematizing the divers and conflicting agencies engaged in secondary education; second, the natural antagonism of the two forces that are contending for supremacy in educational affairs. The elementary school system, as shown in the introductory prospectus, comprises denominational schools under private management and board schools under public control. The former not only antedate the Foster law, but by their church and private affiliations preserve traditions of a policy interwoven with the entire religious history of the country. Before the Reformation "there were schools for the poor, connected in many cases with the monasteries. Such as were founded after the Reformation were, for the most part, independent bodies, but the general character of the objects which the founders proposed to themselves was the same—that of giving special advantages to poor children who were either distinguished for special aptitude or were the natives of particular districts, or related to the founders."²

This policy of private or of ecclesiastical endowment of education has been gathering strength from age to age, and preserves to this day the practical monopoly of secondary education. In the field of elementary education these traditional forces are unable at present to prevail against that later civic impulse which gave rise to the law of 1870 and the new agency of elected school boards. The complications have been increased by the functions of the county councils under the technical instruction laws.

An immediate demand for some measure which should continue the schools interfered with by the court decisions arose from the vast number of students affected thereby. In evening schools alone there were not less than 150,000 pupils who, under that decision, must cease their attendance. Dr. Macnamara, in a speech before the House, said:

There were 260,000 pupils who took up and were qualified for grant in one or other of the elementary subjects; 62,000 in English subjects; 18,500 in languages—French, German, Welsh, and Latin; 32,000 in mathematics; 42,000 in science subjects; 101,063 in commercial subjects; 113,000 in miscellaneous subjects—vocal

¹For the full particulars of this decision see articles by Hon. E. Lyulph Stanley and Sir J. G. Fitch, cited in the Commissioner's Report for 1899-1900, pp. 1210-1223.

²See report of commissioners appointed in 1858 to inquire into the state of popular education in England. Vol. I, p. 15 (issued 1861).

music, ambulance, home nursing, and shorthand; 80,851 in domestic economy and needlework, and 1,846 in other subjects. The point he wished to bring out was that 260,000 pupils took up elementary subjects, and would honorable members not say that their impression of the right honorable gentleman's speech was that these people were engaged upon science? A point he wished to make with regard to the 260,000 pupils was that many of these were persons whose early education had been entirely neglected. Many of them were over 15 years, and whose education had been neglected early in life and they did not come back to science and art instruction. They came back for rudimentary instruction, and it was a calamitous thing if, even at 15, pupils were to be prohibited from continuing this education.¹

Upon a close analysis of the numbers it was found that of 80,000 pupils on the roll of the London board evening schools, 30,000 were over 16 years of age. The number of pupils in day schools affected by the decision was variously estimated. Sir John Gorst, having regard only to branches distinctly recognized as higher, put the number as low as 900. The president of the "Association of Headmasters of Higher Grade and Organized Science Schools" estimated that the limit of age would affect directly 7,000 pupils. Moreover, the impossibility of maintaining the schools on the basis on which they had been organized would actually extend the unfortunate effect of the decision to the entire body of pupils in those schools.² Parents, philanthropists, and labor organizations united with school boards in protests against a measure which threatened to put an end to the instruction of such a large number of aspiring pupils from the laboring classes. Petitions poured in upon members of Parliament insisting that some provision should be made to prevent the threatened evil. Meanwhile the Government endeavored to allay the excitement by an adjustment which it was supposed would meet the needs of all pupils in elementary schools who were able to prolong their studies up to the age of 15, but who are not likely to remain at school beyond that age. This was done by including in the annual regulations for elementary schools dated March, 1901, a minute³

¹ Quoted from a report of Dr. McNamara's speech.

² A return issued by the House of Commons regarding higher grade board schools has been received as this goes to press. This return includes all the higher grade board schools (48 in number) which comprised a school of science in 1900-1901. These 48 schools enrolled 19,774 children 10 years old and upward, and of this number 8,670 were in the school of science section. The "Schoolmaster," commenting on the return, says:

These 8,670 pupils all received an education that includes the work of the first six standards at least; they belong almost exclusively to the industrial and lower middle classes, and they are now receiving a course of instruction which, though not so perfect as it might be, includes English, one foreign language, drawing, and two or three of the basal sciences. It ought to be a matter of congratulation that something is being done in these schools to fit the future generation for the keen competition that the country has to meet. Add to these considerations the undoubted fact that but for these higher grade board schools most of the pupils would finish their education sooner than they do, our satisfaction ought to be all the greater, and our efforts to induce more of them to complete the full course increased.

The school of science course is divided into an elementary course and an advanced course. The elementary course occupies two years, and gives a complete grounding in the subjects already enumerated. In the advanced course the pupils continue their studies further, taking, for example, the advanced stage of certain science subjects and a course of mathematics that includes four books of Euclid and plane trigonometry. From the first two tables of the return we learn that in the year 1900-1901 about 12½ per cent of the pupils in the schools of science were doing this advanced work. This is not so great a percentage as we should like to see, but it must be remembered that it is a percentage of the number then in the schools, and not a percentage of the smaller number in the schools three years ago, and these pupils of the advanced course are pupils of at least three years' standing. It does not follow that 87½ per cent finish their education with the elementary course, for many pupils leave this course to become pupil-teachers, or to continue their training with a scholarship in a technical or other high school.

The return includes also certain higher grade schools (40 in London, and the girls' department of 4 London schools included in the former class and 8 provincial) which do not include a school of science. These schools enrolled 23,968 pupils 10 years of age and upward, of whom 910 were above 15 years of age.

³ The text of the minute is here reproduced from the Report of the Commissioner for 1899-1900:

[Minute of the board of education, April 6, 1900, establishing higher elementary schools.]

A public elementary school may be recognized by the board of education (hereinafter called the board) as a higher elementary school under the following conditions:

1. The school must be organized to give a complete four years' course of instruction approved by the board.

2. No child shall be admitted into a higher elementary school unless he (a) has been under

of the board of education, issued the year before, which provided for the establishment of higher elementary schools of a new type to be fostered by the Government. The minute had not been included in the regulations for elementary schools at the time of its adoption and was generally interpreted as a part of the policy which was excluding the school boards from any further participation in advanced work.

It had been the avowed intention of the London school board to appeal the Cockerton case from the courts to the House of Lords, but they were induced to abandon this purpose by the announcement that the education department would make provision for the continuance of the advanced work. A general expectation was created that the matter would be adequately adjusted, but the mere inclusion of the minute in the code satisfied no one. Its provisions were not well adapted to the higher board schools and its restrictions were fatal to the hopes of a large body of pupils. The hampering conditions of the "minute" are fully set forth in

instruction at a public elementary school other than a higher elementary school for at least two years, and (b) has been certified by an inspector of the board to be qualified to profit by the instruction offered in the higher elementary school.

3. The fitness of any child to continue, or be promoted from one year's course to another, in a higher elementary school shall be certified by an inspector of the board.

4. (a) Attendances may not be recognized in a higher elementary school for any scholar who is upward of 15 years of age, and (b) no scholar may remain in a higher elementary school beyond the close of the school year in which he or she is 15 years old.

The average attendance for any period is found by dividing the total number of attendances made during that period by the number of times for which the school has met during such period. For the purpose of reckoning the average attendance at a higher elementary school an attendance shall mean attendance during two and one-half hours.

5. (a) The school year of every higher elementary school is the year ending on July 31, and no scholar may be admitted for any year's course later than November 1. (b) After November 1, 1900, scholars newly admitted into a higher elementary school must commence with the first-year course.

6. *Temporary article.*—Up to August 1, 1901, the qualification for admission to the first-year course shall, as a rule, be competency to pass Standard IV of the code as shown to the satisfaction of an inspector of the board.

7. (a) The school must be shown to the satisfaction of the board to be necessary in the locality, and (b) the premises must be recognized by the board as suitable for the purposes of a higher elementary school.

8. The teaching staff of the school must possess such qualifications as may be laid down from time to time by the board for the purposes of a higher elementary school.

In the first and second year courses there shall be a teacher, accepted as qualified by the board, for every 40 scholars (or less); in the third and fourth year courses there shall be a teacher so qualified for every 30 scholars (or less) in average attendance.

The grant may be reduced at the rate of not more than 10s. per annum for every unit of annual average attendance above the number for which the school staff is recognized by the board. This reduction will as a rule be one-twelfth of 10s. for every month during which the staff has been insufficient for the annual average attendance.

9. The managers of any school who desire such school to be recognized as a higher elementary school must submit for the approval of the board before July 1 in any year proposals for a curriculum and time-table and such other information as may be required by the board.

10. The grants made to higher elementary schools are as follows:

Principal grant.

	Higher scale.	Lower scale.
First year.....	s. 27	s. 23
Second year.....	35	30
Third year.....	47	45
Fourth year.....	65	55

The board shall decide which, if either of these grants shall be paid in the case of each year's course after considering the report and recommendation of the inspector upon each of the following four points: (a) The suitability of the instruction to the circumstances of the scholars

the following motions formulated by the executive of the national union of teachers before the decision to incorporate it in the ordinary school regulations was known, but reported and unanimously carried in the annual conference which was held after that decision was made public.

That this conference again puts on record its appreciation of the official recognition of the higher elementary education which is given by the minute of the board of education of April 6, 1900, but it protests against those terms of the higher elementary schools minute and against that official interpretation of them which degrade the higher grade and organized science schools to elementary science schools. It calls upon Parliament to remedy the following defects, which will be detrimental to the interests of these schools of the people: First, the restriction of admission to those children who have been for two years in an elementary school; second, the restriction of admission subject to the absolute decision of the inspector; third, the limitation of age to 15 years; fourth, the condition requiring scholars to commence with the first year's course, whatever their qualifications and abilities may be; fifth, the provision in clause 12 which precludes the engagement of special teachers for special subjects.

That this conference claims for English and Welsh children advantages and opportunities equal to those which have been granted to higher grade schools and departments in Scotland with regard to (a) discretionary power as to curricula; (b) grants on an equally liberal scale; (c) recognition of higher departments; (d) extension of school age.

That where the circumstances do not permit of the establishment of higher elementary schools or departments due provision should be made for similar education by means of suitable grants to higher classes in public elementary schools where such classes are established with consent of the board of education.

That, in the opinion of this conference, the age limit of 15 years in regard to the new code is far too low to allow of a full course of higher elementary education and is of opinion that it should be raised to 18 years, as it is in Scotland.

That the higher grant be not only given to higher grade schools, but also to higher grade classes.

That this conference is of opinion that the board of education is interpreting the minute on higher elementary schools in such a way as to injure the cause of national education.

Especially do we deplore the attempt to stereotype the higher elementary school as an "elementary school of science," because, in all large industrial and commercial centers, another type of school giving a training for commercial pursuits is at present urgently required.

and the neighborhood. (b) The thoroughness and intelligence with which the instruction is given. (c) The sufficiency and suitability of the staff. (d) The discipline and organization.

The inspector will recommend the higher grant unless he is unable to report favorably upon the school under these heads.

Grant for practical work.

	Higher scale.	Lower scale.
	<i>s.</i>	<i>s.</i>
First year	8	6
Second year	12	10
Third year	18	15
Fourth year	25	18

This grant will only be awarded where special provision for such work, as regards premises and equipment, is made to the satisfaction of the board. The board shall decide which, if either, of these grants shall be paid in the case of each year's course after considering the report and recommendation of the inspector upon each of the points named in paragraphs (a) to (d) of this section.

11. No grant may be received from the board of education by any higher elementary school in addition to the grants named in section 10 of this minute, with the exception of the fee grant.

12. No member of the teaching staff may undertake duties not connected with the school which may occupy any part whatever of the school hours.

13. Separate registers and separate accounts must be kept for the higher elementary school.

14. No scholar may attend a higher elementary school who is attending an evening school or class under the regulations of the board. This does not apply in the case of a scholar attending an art class above group 1, under the regulations of the board.

In the opinion of this conference the local educational authority is the best judge of the type of school suited to the local needs; and the liberty with regard to curriculum which the code extends to elementary schools in general should be extended to the higher elementary schools.

In the opinion of many the inclusion of the minute in the regulations for elementary schools did not empower the school boards to undertake even the advanced work for which it provided; such was the conviction of the Liverpool school board, as expressed in the following letter addressed to the secretary of the board of education:

SIR THOMAS STREET, LIVERPOOL, *May 2, 1901.*

SIR: I am desired to inform you that the board have at once taken into their very earnest consideration the position with regard to the instruction in their schools in which they are so suddenly and so unexpectedly placed by (what they can not help considering) the extremely ill-advised action of the London school board in withdrawing the important points raised by the "Cockerton case" from the decision of the highest tribunal in the land. The board look upon the judgment of the court of appeals in that case, which by the action of the London school board becomes now the law of the land, as a most disastrous blow to the cause of elementary education and to the welfare not only of the vast industrial classes of this country, but also to the interests (moral, social, and commercial alike) of the whole community.

The board, however, feel that they would not be morally justified, even if they were prepared to accept the legal consequences of their doing so, in failing to comply immediately with an authoritative statement of the law, however much that statement may fall short of what they believe to be wise, and of what they have hitherto been advised to be legal. They have, therefore, at once decided to bring the instruction in their schools at the earliest possible moment into harmony with the law as it appears to be laid down in that judgment, leaving it to the action of the constituencies and to the wisdom of Parliament to find a remedy for the evils that will arise therefrom. They say "appears to be laid down," because after the most careful consideration they have been able to give to the judgment they have been unable to satisfy themselves completely as to the meaning of its somewhat ambiguous terms. The judgment appears to them to affirm the following propositions:

1. That under the act of 1870 school boards are not justified in giving in their public elementary schools, whether day or evening, anything beyond elementary education, as the latter may be understood for the time being.
2. That the "education prescribed by the Whitehall code" for the time being in force "embraces elementary education up to its high-water mark."
3. That whatever instruction is given by school boards, whether in day or evening schools, must be confined to "children;" i. e., apparently to young persons under 16 years of age; and
4. That it is not competent for either branch of the board of education, by "code or directory," to extend in any way the statutory powers of school boards.

Put shortly, the conclusions from the judgment appear to be that whatever instruction is compulsory under the code for the time being in force may legally be given by school boards at the cost of the rates; whatever is merely optional may not.

If this view is correct, the following appear to the board to be its practical consequences:

- (a) The course of instruction prescribed by article 15 (a) and (i) is legal in all board schools.
- (b) That prescribed by article 15 (b) (ii) is also legal "wherever the circumstances of the school, in the opinion of the inspector, make it desirable."
- (c) That contemplated in article 15 (b) (iii), being optional, is illegal.
- (d) The further education of any child beyond the standards, or of any child over 14 years of age who has been twelve months in Standard VII, would also appear to be illegal, and this difficulty to be in no way remedied by the special minute for the establishment of higher elementary schools, the adoption of that minute not being within what are now declared to be the limits to the statutory powers of school boards; and
- (e) The conduct of evening schools as at present carried on becomes wholly illegal, for where the instruction is in elementary subjects it is illegal because given to persons who are not "children," and where it is given to children it is illegal because it is not in elementary subjects.

The board therefore desire to urge the board of education to promote legislation at the earliest possible moment for restoring, as far as may be, the powers of school

boards to what those powers have hitherto been understood to be, and to render legal the valuable work in day or evening schools which has hitherto been carried out by them.

Failing such legislation, however, they desire me to say that after the close of the current educational school year, in July next, they will be compelled to discontinue—(a) manual instruction for boys; (b) cookery and laundry work for girls; c) all instruction for ex-standard scholars; and (d) the whole of the evening school work they have hitherto carried on.

They have accordingly felt themselves compelled, though with the utmost reluctance, to give provisional notice to terminate the engagements of all their teachers employed in manual instruction, cookery, and laundry work—most of whose appointments require three months' notice—and to notify the managers of voluntary schools who send scholars in these subjects to the board's centers that they can no longer enjoy this advantage after the 31st July next.

They are also taking steps to intimate to the parents of all their scholars now in Standard VII and upward that it will be impossible for the board to continue the education of their children after the close of the current educational school year.

It will be necessary for them also to inform the students who have been in attendance at their evening schools that the board can no longer provide similar opportunities of self-improvement, and to intimate to the managers and teachers of voluntary schools in which they have hitherto carried on evening schools, as well as to their own teachers, their inability to reopen such schools.

With regard to much of the instruction hitherto given in their schools in subjects included in article 15 (b) (ii) of the code as relate to children within the standards, the board are in communication with His Majesty's inspector as to how much of it, in his opinion, the circumstances of the respective schools render desirable, and further action on their part may be necessary when they have received his decision thereon.

As an indication of the urgency of action in the desired direction being taken by your board with the least possible delay, I am desired to mention that the number of boys now in the board's schools who would be deprived of manual instruction at the commencement of next session is over 7,000, and the number of similar children from voluntary schools is 1,332, comprising 900 from Church of England, 216 from Roman Catholic, and 216 from Nonconformist schools; that the number of girls similarly affected with regard to cookery is, from the board's schools nearly 7,000, from the voluntary schools nearly 500; that with regard to laundry work there are nearly 1,000 from board schools, as well as 26 from voluntary schools. In reference to the latter subject it may be mentioned that the board have not at present accommodations for dealing with all the girls eligible, but are engaged in supplying the deficiency. The number of Standard VII and ex-VII scholars affected is slightly over 2,000; the number of evening-school students who were in attendance during the last session amounted to nearly 8,500, and this number would, in the ordinary course, be materially increased during the coming session.

EDWARD M. HANCE, *Clerk*.

The Liverpool school board at once took energetic measures to make the facts widely known. A copy of the above letter was sent to every member of Parliament from Liverpool, and the following circular was prepared for circulation among parents:

I am desired to inform you that by a recent judgment of the court of appeal upon certain surcharges made upon members of the London school board it has been decided that it is not competent for school boards, as the law stands at present, to provide at the expense of the rates any education other than that which is purely elementary.

This judgment is, in many respects, a material alteration in what has hitherto been understood both by school boards and by the Government educational department to be the powers of the school boards; but as the London school board has decided not to carry the appeal further, the judgment must, in the absence of fresh legislation, be taken to determine the matter for the future.

One of the consequences of this judgment is that it is no longer legal for school boards to incur any expense on the further education of children who have passed through the seven standards of the board of education's code—except, perhaps, by a repetition of the work of the seventh standard—or upon that of any child who, being over 14 years of age, has been under instruction for twelve months in Standard VII. As, unfortunately, this change will from July 31 affect the education of your child at the above school, unless in the meantime Parliament confers additional powers upon school boards, I am desired to convey this intimation to you

at the earliest possible moment, and to suggest that you take an opportunity of conferring with the head master of the school upon the subject.

From the appreciation which the parents have shown of the educational advantages hitherto provided in the board schools of this city, the board feel sure that the effect of this judgment in seriously restricting, so far as the children of the whole of the industrial and of a large part of the commercial classes are concerned, the opportunities of self-improvement and of preparation for their future commercial or industrial careers will be in the highest degree unacceptable to the parents of the great bulk of the scholars in the board schools.

The board would venture to suggest that every parent who feels himself or herself aggrieved in this matter should at once write to the Parliamentary representative of his or her division—whose name will be found on the accompanying slip—and to the board of education, Whitehall, London, SW., urging them to press upon the Government the immediate introduction of a measure to restore to the school board the full power of continuing unabated to provide for the young people of this great commercial center the educational advantages they have hitherto supplied.

A form of petition to Parliament was also drawn up for circulation among parents and ratepayers. This petition expressed "the dismay which the legal decision excited and the belief that it would affect most prejudicially" the well-being and industrial prospects of the petitioners' children, and would place them at serious disadvantage in the competition of life, not only with regard to the citizens of other states, but also in respect of their fellow-subjects north of the Tweed, and closed as follows: "The petitioners, therefore, pray that the honorable House make such legislative provision as shall secure to your petitioners and their children equal educational advantages to those which your honorable House has provided for our fellow-citizens in Scotland."

LEGISLATIVE MEASURES.

Under the pressure of these events the Government suddenly determined to renew the endeavor made in 1896 to deal with the entire problem of the local administration of secondary education. In May an education bill was submitted to the House of Commons by Sir John Gorst, who styled it a bill "to establish in every part of England and Wales a local education authority for the supervision of education of every kind, whether elementary, secondary, or technical." This measure excited scarcely less opposition than the similar bill of 1896, but as, like that bill, it was speedily withdrawn, its actual provisions and the criticism which it provoked are of little general interest save for the light they throw upon what appears to be the present policy of the Government with respect to education. In this view the article by Hon. E. Lyulph Stanley appended to this review has historic interest. One clause of the bill provided for the continuance of the higher-grade schools, and its withdrawal was followed immediately by the introduction of a short bill (education bill No. 2) dealing solely with this matter. The text of this second bill is as follows:

Where a school board has at any time during the twelve months immediately preceding July 31, 1901, maintained out of school funds, any school or class to the maintenance of which the school fund is not lawfully applicable, the council of the county or county borough within which the school or class is held, or, with the sanction of the board of education, any other local authority under the technical instruction act for the district within which the school or class is held, may empower the school board to carry on for a period of one year from that day the work of the school or class to such extent and on such terms as may be agreed on between such council or local authority and the school board, and to supply for the maintenance of the school or class such sum out of the school fund as the council or local authority may sanction. Where any expenses incurred by a school board in respect of such school or class before the said day are sanctioned by the local government board the legality of these expenses shall not be questioned in any court.

This bill, rushed through Parliament and passed in the short space of a month, has not allayed the excitement caused by the previous measures. The most

obnoxious features of the general bill reappeared in fact in the urgency bill. Its bearing was set forth in a dispassionate manner in the House of Lords by Lord Reay and Earl Spencer. The former, in offering an amendment, said:

The bill proposed to constitute county councils or county borough councils the authority for secondary education, or any other local authority under the technical instruction acts. But what the bill actually did was to leave a school board free to make arrangements with the local authority, and the county council would have to decide upon various disputed points, and the result would be decisions varying in different parts of the country, whereas a decision by the board of education would have general application. The fact that the county or town council would determine the number of these continuation schools and the question of overlapping would be certain to lead to friction. It might be said that the local authorities would not spoil their holiday to make investigations, and would simply allow the school boards to proceed. But there were no guaranties for this in the bill, which must be interpreted by the minute of July 12. The action of the Leeds city council in making their consent contingent upon the adoption of their suggestions for the avoidance of overlapping showed the necessity for an appeal in these questions to the board of education. Such an appeal was given in bill No. 1. As to the financial aspect of the question, if the estimates for next year, out of which the grant for the new schools would be paid, were framed as those of the present year were framed, then the grant under article 17 of the minute would not be available for any schools but public elementary schools. The parliamentary grant must be appropriated as prescribed by the act and for the purposes mentioned in the act, for if the new claims were allowed to come on the grant, the money available for the other claims would be reduced. In order to place on record their views in opposition to this bill, he begged to move that no bill can be satisfactory which does not enable the board of education to empower school boards to carry on out of the school fund any schools affected by the recent judgment for the period of one year to the same extent and on the same conditions as were sanctioned by the board of education for the year 1900-1901.

Earl Spencer, who followed in support of the amendment, dwelt upon the general policy which the bill embodied.

They were told [he said] that this bill was due to the Cockerton judgment, but the Cockerton judgment might have been dealt with in a different way. The illegality of the schools affected by the Cockerton judgment might have been taken away. Ever since the act of 1870, gradually, no doubt, but with increasing force, the school boards of the country had established higher education schools, continuation schools, and they had given education to adults, to those over 15 years of age. He ventured to think that it would have been a much wiser way of dealing with the difficulty to legalize the old method than to meet it by this bill. He said now, what he had said before, that to draw the line too tightly and too strongly between elementary schools and secondary schools would be a serious blow to the education of the people. There was a large number of children who might remain, and therefore it was, to his mind, a very serious matter if they deprived them of this secondary education. The noble duke said there was another mode, and with that the amendment of his noble friend dealt—namely, that the matter should be referred to the education board. He did not for a moment say that this ought to be continued for long, but as a temporary expedient in getting over the difficulty of the Cockerton judgment, he believed it would be a far better solution than that proposed by the bill. The noble duke spoke of the great interest which had been taken in this question, and he should give him the reason why there had been such a great amount of opposition. The Government attached immense importance to establishing in this temporary bill a great principle of education—namely, laying down the principle by which secondary education should be governed in the future. That was one of the reasons why many of them opposed this bill in the form in which it was presented to them. They did not think the Government was justified, in a temporary measure like this, in carrying a great principle with regard to secondary education. It was a great principle to lay down what in the future was to be the local authority for managing secondary education. At first it seemed as if the Government were going to put all education under one authority, and it was wondered whether possibly they were going to put it under the school boards. But they very soon saw that that was not to be the policy, and the authority chosen under the bill was county councils. His noble friend had shown what great difficulties might arise in regard to this. Many of the county councils were already overburdened with work. In his own county a resolution was passed against this very thing. In a large county like Northampton, where men come long distances

to attend the county council, they found it almost impossible to add any new labors to the work of the council. If they added secondary education and then primary education—for this bill was a step in that direction—they would find that the county councils could not carry out the work. He thought that was a very grave consideration. They would have to establish schools in order to give the secondary education which was required, and that would involve an enormous increase of the work, which he knew they had done exceedingly well in connection with technical education. At present county councils were entirely free from the religious difficulty and its unpleasant consequences. The moment they had a number of secondary schools placed under the councils there would be a struggle for the management of them between those who were in favor of certain denominational teaching and those who were in favor of a more generous education. And if elementary education were put under the control of the county councils as well this difficulty would be enormously increased. He was glad to hear what the noble duke had said about school boards, and he was glad to think that he did not agree with what had been said elsewhere, that it was a farce to think that school boards were elected with any educational object. Personally he thought it would be a great disaster if any serious check were put on school boards, which had done enormously good work in the country. He most heartily supported the amendment of his noble friend, which embodied a much more sensible proposal than that contained in the bill now before the House. It dealt with the temporary difficulty in a way which did not create such great and wide differences of opinion as the bill did, and if his noble friend pressed his amendment to a division he should be heartily glad to vote with him.

Though the amendment was lost, these speakers voiced the sentiments of many members of both Houses and also of a large constituency, especially in the great industrial centers. Already the forces for and against the policy of the Government are organizing for what promises to be a bitter and protracted struggle.

In considering the action of the Government in restricting local activity in respect to popular education, it must be remembered that every new impulse toward democracy in England is offset by a conservative movement for the preservation of what is established. The attitude of the Government in the matter of higher grade board schools apparently does not imply hostility to progress so much as concern for its methods and bearings. This view is very clearly set forth in an article by Mr. Cloudesley Brereton entitled "A national system of education," which is included among the papers appended to this chapter.

EDUCATIONAL PROGRESS—STATE OF RURAL SCHOOLS.

While the higher departments of the elementary school work of England are suffering from confused and adverse policies, there are not wanting many signs of vigor and progress in respect to the work as a whole. Among such evidences should be noted the deep concern everywhere manifested in the condition of rural schools. The public agitation of this subject has led to an official inquiry into the financial status of all the public elementary schools of England. The tabulated returns make it evident that the great mass of the rural schools have not sufficient funds for their work. This is true not only of the denominational schools, which predominate in the country districts, but of the small proportion under school boards. The situation was forcibly summed up by Dr. Macnamara, M. P., in a speech at a public conference held in connection with the annual meeting of the national union of elementary teachers:

The village schools, he insisted, were being most shamefully neglected. The State did as little as it could for them, and the localities did less. Pinchbeck and shabby to a degree was the financial treatment accorded to these schools. The grants from the central exchequer were paid to all schools, town and rural, on the capitation principle. The plan might be all right where the number of children by which the capitation payment was to be multiplied was pretty large; but where the number of children was small, the capitation plan was disastrous. The small school must have a lump sum from the exchequer every year sufficient to meet its annual charges for maintenance and establishment. Without this the head teacher would remain scandalously underpaid and shamefully unaided in his labors. Again, the local aid to the village school was shockingly meager.

Mostly the villagers are too poor and too doubtful about the advantages of education to supplement the central aid with anything like generous local subventions. Where there is a school board the area is so restricted and the ratable value so low that a large portion of the local rate raised is eaten up in machinery expenses; and where there is not a school board the majority of the people escape any local charge altogether on the plea that they prefer denominational to undenominational religious instruction, the real preference being a disinclination to pay for either. Now, this grotesque and haphazard plan of financing the village school means, first of all, shocking understaffing. Roughly, throughout the rural areas he might safely say that one-third only of the teachers employed were properly qualified adults. The other two-thirds were either juvenile pupil teachers or unqualified young people with little or no claim to the genuine title of teacher. As a fact, there was only one certificated teacher to every 90 village children in the country. The Government education bill, he hoped, would provide for the creation of county education boards generally to supervise and direct the operations of the village schools, the great bulk of whose income, if not, indeed, the whole of it, should come from imperial sources.¹

The following resolutions on the subject offered by Dr. Macnamara, who has devoted himself particularly to this cause, were unanimously adopted by the union:

This conference is of opinion that a larger proportion of the cost of maintenance of national education should be supplied from the national exchequer, so as, first, to provide adequate financial treatment for all schools; second, to diminish the present unequal, oppressive, and often unjust incidence of the school-board rate; third, to distribute the cost of education fairly over the whole country; fourth, to abolish the present eleemosynary system of insufficient and varying voluntary contributions.

And this conference resolves (1) that the accounts of all voluntary schools should be subjected to the same strict audit at the hands of the public auditor as are the accounts of board schools; (2) that it is desirable to secure the abolition of all charges for rent in voluntary schools.

In his speech on presenting the resolutions Dr. Macnamara stated further that there were—

five millions of children in the elementary schools at the present time. Three millions of these were on the roll of the voluntary schools and 2,000,000 on the roll of board schools. The difference between the two systems arose partly as a result of the difference in local management, partly as a result of the difference in the character of religious instruction, and partly as a result of the difference in the nature and the amount of local financial support. It was the last of these differences to which he wished to draw particular attention. With regard to the central exchequer money they might say that practically board and voluntary schools got pretty much the same amount. The local support, in the case of the board schools, came from the rates of the locality, and to a small extent from school fees. In the case of voluntary schools it came from voluntary contributions, income from endowments, and from school fees. There was no claim upon the public rates. The difference in the character and nature of the local support given was this: Last year the board schools were able to get from the local rates and the small amount of school fees 24s. 2d. per child, whereas the voluntary schools were able to get from their sources only 7s. 9d. per child. The difference was 16s. 5d. a child for the year. That difference had been mitigated by certain preferential acts of Parliament, which did not come to much, so that in the net it came down to a difference of 10s. 6d. a child. That was what Mr. Balfour called the "intolerable strain" which he put on the managers and supporters of the voluntary schools. But the real persons who bore the intolerable strain arising from this differentiation were the voluntary-school teachers. The net difference of 10s. 6d. was almost entirely accounted for when they looked at the salary sheets of the voluntary schools and those of the board schools. A preference for denominational instruction was often given, and no doubt truly given in many cases, as a reason for voluntary schools, but in the great bulk of cases the preference was not for denominational as against undenominational instruction, but the preference for a system under which they could get out of paying for either. They had to get rid of the grotesque anachronism of endeavoring to maintain the intellectual equipment of the people at the hand of charity. School rates were levied over two-thirds of the country; the other one-third had not a local rate.

¹ Quoted from report of speech.

The incidence of the rate was most grotesque. It was a halfpenny here, a penny there, sixpence somewhere else, 1s. somewhere else, 1s. 6d. somewhere else, 2s. in another place, and it went up as high as 3s. 4d. in one particular place. In the rural area the school board was largely eaten up by an unnecessary multiplication of miniature pieces of local administration. Take the county of Norfolk. Leaving out the county boroughs of Yarmouth and Norwich, there were 140 school boards for 22,000 school board children. London had one school board for 550,000 children, and whatever did they want 140 school boards down here for? Look at the incidence of the local public rate. In the parish of Firsfield (Norfolk) it was 11d. In the parish of New Buckenham it was 2s. 1d. They must get away from this hotch-potch work. Take the village of Little Framsham. He had nothing against Little Framsham—he did not even know where it was—but according to the Blue Book it was in Norfolk. In that village there was one board school, with an average attendance last year of 36 children. That board school, with that average attendance, necessitated the triennial election of a school board of 5 members, and it had a paid clerk. See how that worked out. A penny in the pound in Little Framsham raised a precept of £4 17s. If they wanted one decent pupil teacher there was a four-penny rate gone. The election cost £6 19s. 1d. That was nearly three halfpence gone. The clerk's salary was £8. That was nearly two-pence gone. The legal expenses cost £3 1s. 1d., so that the total administrative charges—this was educational home rule run mad—in Little Framsham amounted to £18 2s., so that a threepenny rate out of the sixpenny rate which they levied, or half of the local support, was gone before they got to the school at all. That was not, as they might suppose, an extreme case. It was a common experience to find in a village school board half the rate eaten up by the multiplication of miniature pieces of administrative machinery before they had got to the school at all. They must throw the great bulk of the charge on the central exchequer. Education was a national matter just as much as the army and the navy. They ought to treat the matter as an essential necessity to their progress as a nation. He demanded a larger support from the central exchequer, and if they had a local margin, they must collect it over all the area, and nobody must be allowed on any account to escape. He did not begrudge the expenditure of £120,000,000 last year and this year on the army and the navy and the war, but what he said was that the intellectual equipment of any great nation, to-day, at any rate, was far more important than the physical equipment, having regard to the future of the nation. "Not out of the mouth of the knitted gun, nor the smoothed rifle, but 'out of the mouths of babes and sucklings' is the strength ordained that shall still the enemy and the avenger." Their disregard for public education was costing them dear all the world over. They were only a small people numerically, and they had got to make up for the smallness of their numbers by the higher equipment of the individual unit. Their people must give up the idea that some divine power had given them a monopoly and the supremacy all the world over. They had got to fight their way according to their capacity, and it was for them to claim that the financing of their schools was placed on as generous a basis as their army and navy, and to see that the British people of to-morrow, who were in the schools of to-day, were equipped so that they might adequately and properly carry forward the great heritage which was falling into their hands—the heritage of the imperial greatness of their country.¹

DEVELOPMENT OF BOARD SCHOOLS IN THE CITIES.

The phenomenal progress in popular education in England during the past thirty years pertains to the cities and is due chiefly to the aroused interest of parents and the active propaganda maintained by the school boards.

Table II presents the statistics of London and 65 county boroughs, from which it appears that 59.7 per cent of the pupils enrolled in elementary schools within the borders of these administrative areas are in board schools. For the whole country the proportion of pupils enrolled in the board schools is 47 per cent, and for the counties, excluding the county boroughs, only 37.5 per cent. Thus it appears that board schools, which did not exist prior to 1870, have become the great educational agency in the cities. The purpose of the law of 1870, as already stated, was to provide for the education of the large proportion of youth who were not drawn into the denominational schools. The neglected children belonged chiefly, although not exclusively, to the poorer classes, and the school boards have

¹ Quoted from report of speech.

studied every means of securing the attendance of such children. The first necessity was to get children into the schools, but it soon became evident that this was a small part of what must be done to dissipate the ignorance of the masses. The policy of allotting the Government grant to schools at a certain rate per capita for individual passes in the Government examination (technically payment upon results), bad as it was, educationally had the advantage of showing the necessity of favorable conditions in the schools themselves and of a certain measure of health and strength in the children to be instructed.

Grading and the sifting out of hopelessly defective children have been promoted, indirectly, at least, by the policy. It has served also to show in a very convincing manner, that half-starved, overworked children can not reach even moderate requirements in the most elementary subjects. Thus the sense of public responsibility for the education of the poor, which developed *pari passu* with the extension of suffrage, has led to other public efforts in behalf of the unfortunate classes. The detailed school statistics of six selected cities (Table III, Parts A and B) show the relative strength of the board and the nonboard schools in these cities and the direction of efforts for the adjustment of the school provision to the needs of special classes. The success of these efforts is an interesting proof of the flexibility and the comprehensiveness of the system under which they have been fostered.

The proportion of children classified as infants (column 3) is large. With few exceptions, these are children below 7 years of age (the lower limit of the compulsory school age). The Government has promoted the interests of these younger children by allowing a higher per capita grant where special facilities are provided for them. The latest requirement for the highest grant (9s. per capita as against 7s., the lower grant) is a separate department for infants under a certificated teacher of their own, or a separate class under a teacher not less than 18 years of age approved by the inspector.

TABLE II.

London and county boroughs.	Population (1891).	One-sixth of population (1891) requiring school accommodation).	Number of schools (institutions under separate management).					Accommodation.		Number of scholars on the registers.		Average number of scholars in attendance.			
			National or Church of England.	Wesleyan.	Roman Catholic.	British and other schools.	Total voluntary schools.	Board schools.	Grand total.	Voluntary schools.	Board schools.	Total.	Voluntary schools.	Board schools.	Total.
<i>England (excluding Monmouthshire).</i>															
London.....	4,232,118	705,353	342	16	101	32	491	545,967	805,014	222,019	535,081	757,100	175,809	441,109	616,918
Barrow-in-Furness.....	51,712	8,619	3	---	---	---	6	3,215	11,879	3,312	7,325	10,637	2,712	6,297	9,009
Bath.....	51,844	8,641	16	---	---	1	19	5,270	7,480	5,514	1,413	6,927	4,735	1,174	5,909
Birkenhead.....	49,857	16,643	14	---	4	4	23	2,813	18,447	15,240	3,301	18,541	12,580	2,786	15,366
Birmingham.....	478,113	79,685	38	1	10	11	51	31,783	90,079	29,020	59,016	84,041	24,519	51,216	75,735
Blackburn.....	120,064	20,011	25	4	8	2	44	1,690	29,004	29,215	1,369	28,836	18,258	19,254	37,512
Blackburn.....	115,062	19,167	28	4	2	2	41	13,434	37,113	18,445	13,082	31,527	14,540	10,056	24,596
Bolton.....	49,217	8,263	8	---	2	---	5	4,971	9,495	4,978	4,525	9,503	4,065	4,225	8,328
Bournemouth.....	37,781	6,297	3	---	---	3	13	4,461	4,461	4,734	---	4,734	3,877	---	3,877
Bradford.....	216,361	36,090	34	---	6	1	41	22,739	62,126	15,851	31,392	47,213	12,121	25,134	37,255
Brighton.....	115,873	19,312	15	---	4	---	19	9,525	20,357	7,092	11,492	18,584	5,863	9,596	13,450
Bristol.....	221,578	36,930	46	4	5	1	56	40,708	58,995	24,928	33,667	58,625	20,373	27,977	48,350
Burnley.....	87,016	14,503	13	3	5	---	20	11,448	20,107	9,216	7,843	17,018	6,899	6,252	13,151
Bury.....	57,212	9,535	13	3	8	---	28	14,264	14,264	9,815	---	9,815	7,716	---	7,716
Canterbury.....	23,062	3,844	---	---	---	---	10	3,073	3,780	3,013	---	3,686	2,983	---	2,983
Cherter.....	37,105	6,184	13	1	1	4	20	8,679	8,679	6,917	---	6,917	5,657	---	5,657
Covevtry.....	52,724	8,787	15	---	---	---	14	5,764	12,497	5,377	---	6,917	4,650	---	4,650
Croydon.....	102,635	17,116	17	2	3	4	22	8,210	19,079	7,455	6,732	12,109	4,650	5,701	10,340
Derby.....	94,146	15,691	17	2	3	4	22	8,210	19,079	7,455	6,732	12,109	4,650	5,701	10,340
Devonport.....	54,803	9,134	17	2	3	4	22	8,210	19,079	7,455	6,732	12,109	4,650	5,701	10,340
Dudley.....	45,740	7,623	17	2	3	4	22	8,210	19,079	7,455	6,732	12,109	4,650	5,701	10,340
Exeter.....	37,404	6,234	17	2	3	4	22	8,210	19,079	7,455	6,732	12,109	4,650	5,701	10,340
Gateshead.....	85,662	14,262	17	2	3	4	22	8,210	19,079	7,455	6,732	12,109	4,650	5,701	10,340
Gloucester.....	39,444	6,574	9	1	1	---	12	5,116	16,021	4,688	2,190	6,573	3,613	1,769	5,322
Grimsby.....	51,934	8,656	9	1	1	---	12	5,116	16,021	4,688	2,190	6,573	3,613	1,769	5,322
Hallifax.....	80,832	14,972	9	1	1	---	12	5,116	16,021	4,688	2,190	6,573	3,613	1,769	5,322
Hanley.....	54,946	9,158	6	---	---	---	13	7,395	13,327	4,929	3,227	8,262	4,077	4,092	6,569
Hastings.....	82,223	14,972	9	1	1	---	12	5,116	16,021	4,688	2,190	6,573	3,613	1,769	5,322
Huddersfield.....	95,420	15,963	21	6	1	---	22	9,442	11,878	4,781	8,544	11,305	4,703	7,071	11,780
Ipswich.....	57,380	9,560	6	---	---	---	14	5,101	11,253	4,781	8,544	11,305	4,703	7,071	11,780
Kingston-upon-Hull.....	200,044	33,341	14	1	6	4	25	13,032	32,083	12,573	31,706	44,339	10,355	27,685	38,040

TABLE II—Continued.

London and county boroughs.	Population (1891).	One-sixth of population (proportion requiring school accommodation).	Number of schools (institutions under separate management).						Accommodation.		Number of scholars on the registers.			Average number of scholars in attendance.		
			National or Church of Eng.	Wesleyan.	Roman Catholic.	British and other schools.	Total voluntary schools.	Board schools.	Voluntary schools.	Board schools.	Voluntary schools.	Board schools.	Voluntary schools.	Board schools.	Voluntary schools.	Total.
<i>England (excluding Monmouthshire)—Continued.</i>																
Leeds.....	387,595	61,251	38	1	10	—	48	60,046	89,674	24,563	53,826	78,389	20,085	46,676	67,301	
Leicester.....	174,624	29,104	22	1	3	—	27	27,955	41,674	11,085	26,069	37,094	9,477	23,100	32,637	
Lincoln.....	41,491	6,915	13	6	1	—	19	7,924	7,924	8,506	—	8,506	6,538	—	6,538	
Liverpool.....	517,980	86,320	65	3	35	—	112	41,637	124,190	74,461	44,095	118,556	63,346	37,357	100,493	
Manchester.....	595,368	84,228	57	6	25	—	89	48,651	109,793	53,202	45,632	98,254	42,085	55,647	77,732	
Middlesbrough.....	75,532	12,589	—	—	—	—	—	16,629	16,629	5,307	11,236	16,713	4,671	9,571	14,212	
Newcastle-on Tyne.....	196,300	31,650	—	—	—	—	—	21,493	38,221	14,688	21,388	36,256	11,708	18,975	30,685	
Northampton.....	61,012	10,169	—	—	—	—	—	7,638	12,510	4,544	7,660	17,204	3,095	6,490	10,185	
Norwich.....	100,970	16,828	—	—	—	—	—	13,333	21,641	6,147	14,854	21,001	5,270	12,589	17,659	
Nottingham.....	203,877	35,646	—	—	—	—	—	26,257	45,625	14,618	27,878	42,326	11,869	24,080	35,979	
Oldham.....	131,463	21,910	—	—	—	—	—	13,776	28,122	10,100	13,908	24,068	8,236	11,669	19,355	
Oxford.....	45,742	7,624	—	—	—	—	—	9,989	10,216	7,319	13,702	17,462	6,319	8,718	14,662	
Plymouth.....	84,248	14,041	—	—	—	—	—	9,144	17,454	6,864	10,628	14,068	5,356	8,725	14,662	
Portsmouth.....	150,251	26,542	—	—	—	—	—	8,874	32,571	4,881	25,716	30,367	4,190	22,011	23,210	
Preston.....	107,573	17,929	—	—	—	—	—	26,637	32,238	21,564	10,674	17,428	18,197	—	18,197	
Reading.....	60,054	10,069	—	—	—	—	—	8,222	13,105	4,970	7,938	12,458	6,685	—	6,685	
Rochdale.....	71,401	11,900	—	—	—	—	—	7,976	15,365	5,164	7,264	12,428	5,021	5,863	10,406	
St. Helens.....	71,288	11,881	—	—	—	—	—	19,208	19,208	18,144	15,672	18,144	15,169	—	15,169	
Salford.....	198,139	33,623	—	—	—	—	—	16,233	44,624	24,257	15,672	39,439	18,853	12,607	32,520	
Sheffield.....	354,243	54,041	—	—	—	—	—	45,072	68,534	22,907	43,244	69,151	19,628	23,878	64,406	
Southampton.....	65,325	10,888	—	—	—	—	—	11,325	16,210	4,396	11,682	17,078	4,265	9,663	14,018	
South Shields.....	78,391	13,685	—	—	—	—	—	4,885	17,894	4,960	14,077	18,737	3,718	11,645	15,363	
Stockport.....	70,263	11,710	—	—	—	—	—	13,457	15,467	13,804	14,077	15,804	10,619	—	10,619	
Sunderland.....	131,015	21,836	—	—	—	—	—	17,240	25,216	7,785	18,219	27,004	6,539	16,095	23,324	
Walsall.....	71,789	11,965	—	—	—	—	—	8,894	15,048	6,034	8,691	13,355	5,439	7,794	13,489	
West Bromwich.....	59,912	9,912	—	—	—	—	—	8,179	13,452	6,417	7,441	12,808	4,735	6,967	11,692	
West Ham.....	294,963	34,150	—	—	—	—	—	50,807	68,497	8,234	44,534	52,768	6,727	38,428	46,825	
Wigan.....	95,013	9,169	—	—	—	—	—	13,307	13,307	11,839	11,839	11,839	9,724	—	9,724	
Wolverhampton.....	82,662	13,777	—	—	—	—	—	6,284	18,856	1,644	5,630	17,474	8,897	5,146	13,643	
Worcester.....	42,908	7,151	—	—	—	—	—	918	9,255	7,391	6,631	8,222	6,483	—	6,483	

TABLE III. *A—School statistics of typical cities, 1900.*

[illegible]

Cities.	Date of census.	Popula- tion.	Enrollment.			Per cent of total enroll- ment in board schools.	Ratio of average attendance to enrollment.		Total teachers in board schools.	Expenditures by board.	
			Denomi- national schools.	Board schools.	Total.		Denomi- national schools.	Board schools.		For main- tenance of board day schools only.	Total ex- penditure by board.
London	1891	4,232,118	219,921	536,019	755,940	71	Percent. 73.4	Percent. 82	12,620	\$9,333,730	\$13,562,136
Birmingham	1891	478,113	29,512	59,993	89,415	67	82.3	85.4	1,656	813,909	1,141,380
Bradford	1891	216,361	15,652	32,652	47,704	67	80.41	84.35	1,009	286,452	785,432
Liverpool	1898	698,645	74,147	46,929	121,067	39	79	78	1,049	638,574	861,629
Manchester	1891	505,368	53,202	45,652	98,254	45.8	79	83.6	1,144	506,689	861,629
Sheffield	1891	354,243	23,296	43,661	66,957	65.29	84.8	86.8	1,144	506,689	861,629

^a Estimated by medical officer.

TABLE III. B.—School statistics, 1900.

Cities.	Enrollment in board schools.		Schools and classes for blind and deaf children.		Schools or classes for feeble-minded.		Advanced classes or higher grade schools.		Evening classes or schools.		Truant schools.		Industrial schools.				
	Total.	Proportion of pupils classed as infants.	Number of.	Blind and deaf children under care of the school board.		Number.	Enrollment.	Number.	Enrollment.	Number.	Enrollment.	Number.	Enrollment.	Number.	Number maintained by school board.	Number of pupils in charge of school board.	
				Day schools.	Boarding schools.												
London.....	536,019	Percent. 35.7	27	674	-----	43	2,030	44	23,968	368	125,640	2	351	2	451	3	2,916
<i>Provincial cities.</i>																	
Birmingham	59,903	36.5	2	46	39	5	67	2	990	23	5,446	-----	-----	-----	-----	-----	-----
Bradford	32,052	-----	-----	-----	9	5	90	6	2,675	215	9,513	-----	-----	-----	-----	-----	52
Liverpool	49,320	32	-----	-----	177	1	91	1	-----	33	8,452	1	137	4	801	-----	1,499
Sheffield	43,661	24	-----	-----	56	2	46	1	1,022	31	7,068	1	90	-----	-----	-----	139

* These pupils are not all in secondary studies, as the higher grade schools include also elementary grades; on the other hand there are pupils in elementary schools taking one or more advanced studies.

^b Of these, three under private managers.

The following statements relate to the progress in the work of school boards or to special features of the work comprised in Table III B.

London—Increase of school accommodation and enrollment.—The school board for London, which consists of 55 members, was created immediately after the passage of the school law of 1870. At that time there were 574,673 children of school age in London, and there were only 261,158 school places available for them. The board is organized in several distinct committees, each responsible for a particular part of the work, but for many years the energies of all the members were taxed to the utmost by the mere effort to secure sites for required schools, erect buildings, and get the neglected children into them. According to the official report for 1900, there were scheduled in March of that year 827,712 children between the ages of 3 and 13, and for these 781,553 school places were required. The actual school provision was 767,470 places (546,483 in board schools, 220,987 in nonboard schools).

The average number of children on the rolls was 755,940, of which number 70 per cent were enrolled in board schools. The increased accommodation has been made wholly by the board, the number of places in nonboard schools being less than in 1870, when the board was created.

The number of children between the ages of 3 and 13 who were not upon the rolls of efficient schools in 1900 was 119,538. These were accounted for as follows:

Two thousand and ninety children were under instruction in some other way, viz, 1,017 receiving efficient instruction at home and 1,073 attending nonefficient schools. Of those who are not under any instruction at all, there were 97,511 children under 5 who did not and can not be compelled to permanently attend school. The remaining 19,937 children comprised the following: Those who were wholly exempt, those who were permanently disabled, those who were in the country, those who are ill or delicate or who reside in houses where there is infectious illness, those who were out of school owing to the want of accommodation or owing to accommodation being unsuitable, those who were under surveillance by the respective divisional committees, and a few others who could not be classified.

There were 57,395 children over 13 on the rolls of efficient schools.

The enormous effort expended in keeping track of the children is indicated by the staff of the committee engaged in this work. It includes 10 divisional superintendents, with 11 assistants, 33 clerks, 14 office attendants, 332 ordinary visitors, and 13 unattached visitors who serve in the absence of ordinary visitors.

The street visitors, of whom one is attached to each division, are engaged in dealing with the cases of those children who frequent the streets or open spaces, markets, railway stations, etc.

Schools for special classes.—The board maintains eight day schools for blind children, which had an attendance of 202 pupils in 1900. In these schools the children have medical attention and are often so benefited that they can be returned to the ordinary schools. A few are subsequently advanced to the Royal Normal College for the Blind.

The board has also opened 19 day centers for the education of deaf children. The average attendance for the year 1900 was 472, and the number of teachers employed 63. The oral method of instruction is employed excepting in the case of extremely backward children who can not be taught on purely oral methods. During the year a number of the younger children were grouped together for separate instruction. Of this school the report says:

It is an ideal infant school, and the interest and intelligence of these young deaf children is being stimulated in a marked degree. It is hoped that the methods employed so successfully here will be copied by all the infant teachers at the other centers, and with that end in view they are paying visits to the school. The delight these young deaf children take in drawing, especially in color, is something akin to the blind child's fondness for music.

The London board established schools for feeble-minded children as early as 1891. The work has steadily increased, and for 1900 there were reported 43 schools or centers, as they are called, with accommodation for 2,030 pupils of the class designated. The schools are under the supervision of Mrs. E. M. Burgwin, a distinguished specialist, and all the teachers are trained for the work, which is largely individual and exceedingly arduous. In the poorer districts the children attending these schools are supplied with milk during the morning session and a meal at midday, the cost being defrayed by private funds.

The senior boys where possible attend the manual-training center, and it is a matter of regret that all the capable lads can not for want of room obtain this form of instruction. Many of them could also probably be prepared to earn their living in laundries and restaurants if able to attend the proper classes. The girls, by needlework, housewifery, cookery, and laundry instruction, leave school well able to earn their own living. A master of a boys' school writes: "You will be pleased to hear that I have this morning sent one of the lads who came to me out of the special school a year ago to a good place in a stick factory, where the training in design, etc., which he began in the special school and continued here, will be of use to him. He is to have 6 shillings a week to begin with." This proves that the time spent upon drawing, design, and color work is a profitable form of instruction as well as an agreeable change from the drudgery of the three R's.

For neglected, unruly, and incorrigible children the board maintains 3 residential schools, 1 day industrial school, and 2 truant schools, and is also empowered to commit children to other certified industrial schools. In 1900 the total number of children under the care of the board in industrial and truant schools was 3,893.

An interesting department of the provision for incorrigible boys is the Shaftesbury training ship. Here the boys are subjected to regular discipline and training which prepares them for the merchant marine and naval service, in which several lads from the ship have already distinguished themselves. Measures are taken by the board to maintain some care over the boys even after they have left the ship.

Birmingham.—The Birmingham schools have been particularly distinguished by the provision for physical training. On this subject the Government inspector reports:

No account of school life in Birmingham, however incomplete otherwise, ought to fail to notice the provision for physical training, which is, I believe, unique. Apart from the regular and systematic exercises carried on in all the schools of the city, a very comprehensive scheme exists for the encouragement, promotion, and control of outdoor games, as well as drill and gymnastics. This scheme is a section of the work of the Birmingham Athletic Institute, by whom it is fathered and financed. It is managed by a committee of 8, upon which board and denominational schools, head and assistant masters are equally represented, with a member of the institute council as chairman and the general secretary of the institute as secretary. Under these auspices, cricket, football, swimming, running, and gymnastics are systematically organized. Challenge shields are competed for annually, while medals and books are awarded to the individual boys of the winning teams, with free passes to the county cricket ground for cricket, and medals to the teachers who have acted as trainers. The only condition of entry is that the competitors must be under 14, and not above the sixth standard; they must have been on the register of the school continuously for the previous three months, and must remain so during the period of competition. It is particularly pleasing that the leading athletic clubs of the city foster and partially support those branches of sport with which they are particularly concerned, thus keeping themselves in touch with the boys, creating a recruiting ground for their own ranks, and giving them a keen desire to excel.

To add importance to the various competitions in the eyes both of the boys and of the public the finals are contested publicly and in classic places, e. g., the final match for the cricket shield is played on the county cricket ground, with county professionals as umpires and judges of the prizes. That for the football shield is

played immediately before the final for the Birmingham District and Counties Football Association challenge cup, with the same officials for both matches. The 100-yard interschool race is decided at the Ashton Villa ground—the best athletic ground in the city—the race being managed in every way as at a senior meeting; the swimming finals are taken on a night specially set apart at the best first-class baths in the city with a leading public person as chairman; and those for drill and gymnastics at a public gathering in the gymnasium of the Athletic Institute, the leading professors acting as judges.

The chief difficulty—I need scarcely say how great it is—as regards cricket and football is the want of public playing spaces; but the senior clubs recognize this and occasionally allow the use of their grounds. A great deal is done by the city baths committee to foster the learning of swimming in elementary schools. Poles with bands attached are kept for the use of teacher and boys, and free passes are awarded to the boys who learn to swim one length of the bath—about 30 yards. These free passes entitle the holders to admission to the baths for a year, even though they may have left school for work during that year. Better still, they are now renewed yearly so long as the boy is a scholar; so, that if, as it does happen, a boy of 7 or 8 years of age can swim a length of the bath he is entitled to free admission for the remainder of his school days. During the past year 350 boys have become entitled to free passes, in addition to 67 old holders still at school. I much regret to notice that out of the 36 schools represented 6 only are voluntary schools. Here again are the disabilities of limited staffs; a teacher can not be spared to take the boys.

I am glad to have the opportunity of recognizing the untiring and successful efforts of Mr. J. Adams, headmaster of the City Road board school and secretary of the Athletic Institute, in connection with the sports section of school life in Birmingham. (Report of Board of Education 1899-1900, pp. 173, 174.)

Bradford.—The educational authorities of Bradford have been active in endeavors to correlate the different classes of schools. The technical college of that city was transferred to the municipal authorities in 1899. The statute under which it has been reorganized provides that no secondary day school or school of science shall be carried on in the college, but that day and evening classes may be held—

(a) In the subjects of art and of manual, scientific, or technical instruction connected with the trades and manufactures of Bradford and the neighborhood, to which none shall be admitted under the age of 15 years, except on the recommendation of the governing body of the school in which they have been taught, and in no case under the age of 14 years.

(b) In advanced commercial subjects at day and evening classes, to which none shall be admitted under the age of 16 years.

Pupils are prepared for the college in the higher grade board schools and in the "grammar school." For the benefit of poor children of marked ability free scholarships tenable at the higher grade schools have been established. In March, 1900, an examination was held at which 587 candidates were present and 259 obtained scholarships.

In this connection the report of the school board for 1900 presents the following statement:

Maintenance scholarships.—The granting of maintenance scholarships to poor scholars, thereby enabling the parents to forego their earnings and securing the attendance at school of bright and intelligent children, has been continued and extended, though the committee regret that their action has been greatly curtailed owing to the city council's grant not being of a more liberal character. With the view of meeting the case of the added areas, 15 additional scholarships have been granted during the year 1900. The allowance in each case is 12s. 6d. per month.

Gifts for maintenance scholarships.—A letter was read at the board meeting held on August 30, 1899, offering to give £22 10s. in order to provide three maintenance scholarships for one year on condition that the name of the donor was not divulged. It was resolved that the thanks of the board be forwarded to the donor, with an expression of regret that he does not wish his name to be coupled with the scholarships. A similar gift was reported on October 24, 1900, from the same donor.

In connection with the opening of the new commercial school in Carlton street 176 free scholarships have been awarded, 26 scholars electing to pay the fee of 6d. per week.

Scholarships won by board school scholars.—During the term of the present board the following scholarships have been won by pupils attending the board's schools:

	1898.	1899.	1900.
Nutter scholarship at grammar school (boys)		1	1
Higher grade school scholarships (boys and girls)	318	176	235
Commercial school scholarships (boys)			138
Brown scholarships at grammar school (boys)	2	1	
Governors' scholarships at grammar school (boys)	4		
Lister scholarships at grammar school (boys)		2	
Private scholarships at grammar school (boys)	1		
City Council scholarships at grammar school (boys)	16	41	9
City Council scholarships at grammar school (girls)			2
Foundation scholarships at grammar school (girls)	2	2	3
Total	343	223	388

It should be noted in connection with the second item recorded that free scholarships—tenable at the higher grade board schools—are awarded to scholars from both board and voluntary schools, without distinction, but the numbers given do not include the scholars from the latter. Numerous scholarships have been won at the technical college, but a complete statement can not be given.

Liverpool.—In their report for the triennial period ending November 25, 1900, the Liverpool school board give interesting particulars respecting the conduct of their day industrial schools. Of the industrial schools, both residential and day, it should be said that they are a modified kind of reform school, to which unruly children may be sent by the school authorities without the process of conviction in the courts. The residential industrial schools date back to a law of 1866, but the school law of 1870 transferred the power of commitment to these from the prison authorities to the school authorities. The law of 1876 authorized the establishment of day industrial schools for the children of drunken and dissolute parents for whom the ordinary penalties of the compulsory school laws have no terror. Most of these children, by reason of dirt, nakedness, or hunger, are both unfit and unable to attend other schools. In the day industrial, in addition to ordinary instruction, manual training and food are provided.

The law of 1876 gave rise also to truant schools, in which special arrangements are made for the discipline and detention of vagrant and unruly youth.

With respect to the day industrial schools the Liverpool board report as follows:

The treasury make an allowance of 1s. per child per week toward the expenses of this kind of school; and this amount, with that which the parents have been ordered by the magistrates to contribute, if the latter were fully paid, would, until recently, have defrayed the entire cost of maintenance. The number of children under commitment to these schools has, however, fallen off so much lately (from 1,222 in 1891 to 673 in 1900—a decrease of 549, or nearly 45 per cent) that the cost per head on the average attendance has risen from 2s. 10d. to 3s. 9d. per week. During the year ended December 31, 1899, the deficiency arising from this cause involved a charge upon the rates of £1,817. It has, however, been found impossible, owing mainly to the change in the mode of procedure introduced by the summary jurisdiction act, 1879, to enforce the payment, by the parents, of any large portion of the amount ordered; with the result that the actual cost of these schools to the rates during the twelve months which ended on September 29 last amounted to a little over £4,900. The following figures will show even more strongly the disastrous effect of the alteration introduced by the act referred to. The sum which, under the magistrates' orders, became due from the parents during the three years ended September 29, 1900, was £7,374; of which sum only £1,256, or 17 per cent, was actually collected from them, a further amount of £413 being received from the various boards of guardians. Out of a corresponding amount of £6,611, which fell due in the three years preceding the operation of the summary jurisdiction act, 1879, no less than £3,942, or nearly 60 per cent of the whole amount, was actually received from the parents.

The present board have recently, for hygienic considerations, adopted for these schools a somewhat more varied and slightly more liberal dietary scale, which will, no doubt, to some little extent, add to the future cost of the schools.

Through the continued kindness of some few gentlemen, the children of these schools have, during the term of the present, as during those of some preceding boards, enjoyed each year a holiday, varying in length from a week to a fortnight, in camp near the Meols shore, under the care of their teachers. The only charge involved thereby to this board has been the provision of a slightly more generous dietary than that which is provided for the children when at their respective schools, and the cost of carriage of the provisions to the camp. This holiday is found to have a very beneficial effect, not only upon the health of the children, but also upon their relations with the teachers of the school. It brings teachers and children together, and inspires mutual confidence and regard between them, in a way that the ordinary intercourse of the school can not effect; and it thus greatly assists the superintendents in learning the real character and individual needs of the young people intrusted to their care.

The board are also much indebted to lady members of the Kyrle Society for the interest they take in these children, and for devoting in each of the schools, to their amusement and elevation, an hour once a fortnight in the afternoon, in providing "happy afternoons."

The order in council under which children are committed to day industrial schools requires that the religious denomination of each child shall, as far as practicable, be ascertained and be specified in the warrant of commitment; that a child shall be sent, when possible, to a school conducted in accordance with the tenets of the religious body to which he belongs; and also, that ministers of religion shall be admitted, at times to be approved by the secretary of state, "for the purpose of instructing him in religion." The elementary education act of 1876, also, under whose provisions this order in council is issued, extends to day industrial schools those provisions of the elementary education act, 1870, which affect industrial schools established by school boards, one of which is that such schools, when established, shall be subject to the provisions of the industrial schools act, 1866, and not to those of the elementary education act itself.

In view of these provisions, a former board adopted, after consultation with the then secretary of state, and the present board have continued, the following regulation on this important subject, viz:

17. Religious instruction shall be governed by the following rules:

(1) Religious instruction and observances shall take place each day from 9 to 9.30 a. m. and from 5.40 to 6 p. m.

(2) The ordinary religious instruction and observances shall consist of prayers and hymns and reading from the Bible, with such explanations and instructions therefrom in the principles of religion and morality as are suited to the capacity of children; and in the selection of such prayers and hymns, and in explanations and instruction from the Bible, no attempt shall be made to attach children to or to detach them from any particular denomination.

(3) No child shall attend the religious instruction or observances or shall be taught the catechism or tenets of any religion to which his parents or guardians object, or other than that to which he is stated in the order of detention or attendance order to belong.

(4) With regard to children who are specified in the order of detention or attendance order as belonging to any particular religious persuasion, the managers shall, so far as practicable, make arrangements that such children shall, during the times set apart for religious instruction, attend religious instruction or observances conducted voluntarily by ministers of such persuasions, or by such responsible teachers of the school or other persons as are delegated by such ministers with the approval of the board.

(5) While any religious instruction or observance is going on none of the scholars or teachers shall be employed in any other manner in the same room.

(6) Facilities shall be provided for special religious instruction being given at stated times on Sunday, by volunteers, to such of the children of their respective churches as of their own free will may attend such instruction.

Under the terms of paragraph (4) of this rule most of the board's teachers in these schools, delegated by ministers of their own respective denominations, with the sanction of the board, give distinctive religious teaching to the children belonging to those denominations.

Manchester.—The following account of one of the free schools of Manchester is given by a correspondent of the Manchester Guardian:

The school which I visited has at least two claims to distinction. In the first place, it has a roof playground. The children go for their school games up among the chimney pots and the lightning conductors, which they might almost touch. This dizzy playground is, of course, walled and railed securely, but at one end there is a wire-barred window through which you may look down upon and over the back yards and smoking chimneys of the city, hearing the while the murmur of its unceasing "labor anthem"—surely a fit watchtower for Carlyle's night philosopher. In the second place, this was the first school in Manchester to be built on the class-room principle. Formerly all the classes in an elementary school were taught in one large hall. The national society in its early years laid down the lines upon which, in its opinion, the schools for the common people should be

built. "A barn," its circular said, "furnishes no bad model, and a good one may easily be converted into a school." For many years, even far into the era of school boards, elementary schools were planned upon the barn model. But the up-to-date school building is divided into class rooms, with a large central hall which is intended to be a reservoir of fresh air and to be occupied by the children only in the hours of prayer and singing, but which too often, owing to the crowded state of the school, has to be used for the ordinary work of class teaching. A third characteristic of the school under notice is that it is a "mixed" school—that is to say, boys and girls are taught in it side by side. In Great Britain the dividing line between mixed schools and schools in departments seems to be a line of latitude. In the south there are no mixed schools; in the north mixed schools are universal. That is a broad and general statement of the fact. The Wesleyan Methodists have mixed schools both north and south, but that is because they learned their educational ideals from David Stow, a great Scotch educationist of the first half of the century. The objections to the mixed system are mostly morbid. One excellent member of the Manchester school board a few years ago held that even the infants ought to be separated according to sex. But the system has been found to be successful in Manchester, and it has now been applied to some 30 schools.

In the large infants' hall fires were blazing cheerfully in two open fireplaces. Without there was all the dreariness of a typical Manchester day; here rain and fog, and Manchester itself could easily and agreeably be forgotten. Even the school canary, which ought to have special prejudices in his blood against a Lancashire October, was expressing his giant soul in delighted song. Plants and flowers were suspended around him and stood in the windows and upon shelves. Answering my look of pleasure as my eyes fell upon detail after detail of this bright nursery school—the green plants, the singing canary, the goldfish in a tank—the head mistress, who is tireless and cheerful because she is in the midst of work which she enjoys, said, "We can't take the children to the country in Manchester schools, so we bring the country to them as much as possible. We plant and grow in the school acorns and beans, and hyacinths and crocuses. Our school pets include a newt, a snail, and a beetle," which were produced before me. There is a small museum in a glass case placed on the floor, so that all the children may see it. It contains, among many articles of natural history, a wasp nest and a bee hive, without, however, "the singing masons building roofs of gold."

Another case holds models of three landscapes—one in the Arctic regions with a snow hut, the second a desert in Africa with a camel, and the third an English meadow "with," as an awe-struck little girl says, "a cow that moos." The little boys and girls are all happy and clean and well. They were fixing the letters of the alphabet upon their minds or learning to count or to write. The wonder of babyhood had not quite left their faces, and yet they had made some beautiful artificial flowers, produced neat specimens of writing, and begun simple painting.

The babies' class is pretty much what its name says—a class of babies. "Is there any good in having such very young children here?" I asked. The teacher, who looks ahead, replied: "It is good for the children to come here and learn a little at their play; it is good for the mothers to have such a place as this to send them to, and it is good for the schools and the teachers—afterwards," which means that children who have been through the babies' class are easier to teach in the standards than those who are not sent to school until they are 5 years of age. A little boy 3 or 4 years old was pulling at my coat. "We have a white mouse," he said, "and it comes out and eats bread." I witnessed the mouse feeding, to the delight of his baby owners. The classroom of these very little children is perhaps more a nursery than a schoolroom. They play at skittles and count as they bowl one over, and a swing and a see saw aid their instruction similarly. In the glass cupboard there is a tea service, and the babies have occasional tea parties. When I saw them most of them were nursing dolls. One little girl, who had just come to school and was not yet reconciled to her new surroundings, had laid her doll on one side and was sitting apart, not crying, but brooding over what no doubt was a very deep sorrow. In place of the dolls, engines and working donkeys are provided for the boys, "for boys," says the teacher, "like change." But the toy of which the babies think most is a model of a coast scene. In this there is a sandy beach with a sailing boat and a bathing van, and there is a light-house tower in which, on rare occasions and as a great treat, a night light is burned. All the time the babies are learning something, and what is perhaps more important, they are unconsciously becoming related and attached to school and school life.

In the senior school, which is under an earnest and zealous teacher, there is naturally a look of more serious purpose in the eyes of the children. They are older and more is expected of them. Boys and girls sit side by side. In mixed

schools in some other parts of the country the boys sit all on one side of a table and the girls all on the other, and a boy is sometimes sent to sit among the girls as a punishment, which is a thing terrible to be borne. But in this school the mixing is real, and sometimes a boy is at the head of the class and sometimes a girl. Though of course there are no games or toys here, the hall of the senior school is, like that of the infants, made bright with flowers and plants. The children are neat and sharp. At the sound of a gong they change from one lesson to another with the simultaneous punctuality of soldiers. Looking at their bright, interested faces I could almost believe that some of them liked school, and I confided the suspicion to their teacher. "I am sure the boys of to-day like school much more than the boys of a dozen years ago," he replied. "Their teachers are more qualified, more humane, and more satisfied with their conditions, and these things make school life more pleasant." One boy confessed to me in the presence of his teacher that he liked algebra. I should have been inclined to doubt it and to suspect him of a sinister design had he not declared with perfect candor (also in the presence of his teacher) that there was one lesson which he "detested," and that was the lesson in singing and ear tests. I thought it equally creditable to the boy and to the teacher that such a bold declaration should be made without hesitation on the one side and without rebuke on the other. The incident goes some way to account for the improved tone which has of late years been noticed in the elementary schools. Boys and girls are now rational beings, and not pieces of a great machine.

Manchester stands preeminent among English cities for progress in the coordination of different classes of schools. This work is incidentally disclosed in the following article:

TECHNICAL EDUCATION IN MANCHESTER.

In no English city is a more sensible or more thorough provision for technical education to be found than in Manchester. Whatever standard of comparison is adopted, be it the number of students under instruction in proportion to the population, the amount of annual expenditure, the number of the schools, or the enthusiasm of its administrators and teachers, Manchester will take one of the foremost places in the educational ranks of the country. In some particulars, indeed, Manchester stands almost alone. In the arrangements which the technical instruction committee of its city council and its school board jointly have made to secure the coordination of all educational efforts within their borders, and so avoid that overlapping which is such a prolific source of loss and disappointment in many other districts, this center of the great cotton industry may well serve as an example of a community where the first object of public men is to secure educational efficiency and not to assist the glorification of a particular board or committee.

This success is largely to be attributed to the recognition of the fact that any successful system of technical instruction must be adequately based upon a graduated supply of elementary and secondary education. It is too often imagined that technical education is independent of the work of the public elementary and the grammar schools. But in Manchester it has been for years borne in mind that it is only those youths who have received a thorough preliminary education who reap any advantage from the lectures and laboratory work of the technical school, be it never so perfectly equipped and staffed. The student of education consequently finds, when he endeavors to account for the satisfactory system of technical instruction in Manchester, that, in addition to the ordinary public elementary schools, supplying besides the three R's an elementary introduction to the principles of physics and chemistry, the school board have provided four higher grade schools, all of them furnished with a "school of science," and, as readers of Nature know, the curriculum of schools of this type is eminently suitable as an introductory course for boys and girls who will later proceed to the technical school.

Adequate provision is also made for the children of a higher social status. Manchester is well provided with secondary schools. Its grammar school and its high school for girls both deservedly occupy high places among the public schools of the country. Manchester grammar school, moreover, appears to have been one of the first to teach practical chemistry, for it possessed a small laboratory as long ago as 1868.

There is, too, every facility offered to bright children of the elementary schools to pass forward either to the higher grade school or to the grammar school, this desirable end being secured by a sensible scheme of scholarships. By the same means a vital connection is assured, by way of the secondary schools, between the elementary schools and the municipal technical school and the university college.

Nor are the educational needs of youths who have begun the serious business of life neglected. All the schools, to the work of which brief reference has been made, are intended for young people who have as yet entered neither trade nor profession. But in all manufacturing districts the great mass of the workers have to complete their education by well-sustained efforts in evening classes of one kind or another. The authorities in Manchester are fully alive to this fact, and a wonderfully complete system of evening classes has grown up, in which it is interesting to note that the school board and the technical instruction committee can work together without friction and with the best results. Two sets of these classes are in vogue. First, there are the classes with which the school board are more directly concerned—the evening continuation schools in which youngsters from 12 to 16 years of age who have left the public elementary school for the shop, the warehouse, or the factory are either preparing themselves for the more advanced classes of the technical school or are perfecting and continuing the work they did at school with a view to making themselves of greater value to their employers. Secondly, there are the evening classes of the technical school, intended for young men and women of 16 and upward, of which it is difficult to give an adequate idea in a few sentences. To really appreciate what is being done in such classes every winter's evening in large manufacturing districts, it is necessary to visit the schools where they are held. The determined efforts the young men and women, who, be it remembered, have generally spent a laborious day earning their daily bread, will make in order to become acquainted with the principles of science on which their work depends, or to become familiar with the canons of art they hope to apply in designing, are well calculated to inspire the hope that this country will some day take its former position in the industrial contest among the nations.

The students of the day technical school and day school of art are composed chiefly of the sons of middle-class parents. In the majority of cases they do not enter seriously into the work of manufacture and distribution until after completing their studies. It is gratifying to be able to report that there are some exceptions to this rule. Some enterprising employers have made arrangements for sending certain of their employees to the technical school during the day—the employers themselves bearing the expense thereby incurred. It is much to be desired that this far-seeing policy may be more generally adopted. And there are also the scholarship holders from the higher grade schools. Such is, in skeleton form, the system of technical education which has been gradually evolved in Manchester. * * *

Another cause of the high state of development of education in Manchester is the broad view which the technical instruction committee have taken of their duties. On at least two separate occasions they have arranged for their director, with certain members of the committee, to visit foreign countries to study other systems of technical instruction, and on another occasion they have sent him alone to visit the United States. In this way these Manchester authorities have become practically acquainted with German and American ideas of education. They have not endeavored to follow slavishly such methods in their entirety, but have not hesitated to import notions they considered suitable for the peculiar needs of their own district.

The same committee have also taken a large part in the formation of public opinion in matters educational in Lancashire. At their instigation several conferences have been held of representatives of the numerous county boroughs in their immediate neighborhood. Resolutions have been adopted and widely circulated urging the need of legislation to insure that secondary (including technical) education shall be placed under the control of municipal councils, though the desirability of coopting upon the educational committee an effective minority of persons of special experience in all grades of instruction, as well as of encouraging the joint action between the authorities of county boroughs and that of the administrative county have been recognized. But, if they would consider this question more from the national point of view, this enterprising local authority for education might come to a different conclusion. What is the state of affairs in southeast Lancashire? For the sake of example let Manchester be taken as a center, and consider chiefly the technical education of the district. In this central city there will shortly be, in full working order, a technical school, erected and equipped at a cost of upwards of a quarter of a million, and really provided with accommodation enough for all the advanced technical students which the whole area under consideration could provide. Yet, within easy walking distance, there is the Salford Royal Technical Institute, also admirably organized and generously staffed, and this simply because Salford happens to be a separate borough. The other boroughs of this same area are, moreover, very close together. Stockport, with its own technical school, is within about 5 miles, and has a splendid train service connecting it with Manchester. Bury, Bolton,

Oldham, Rochdale, and other boroughs are sufficiently near for their advanced students to be drafted to Manchester for instruction—the railway fares could easily be provided by means of scholarships. It would certainly seem as though, in the best interests of technical education, an area much larger than that of a county borough is desirable. With boroughs so near as they are in southeast Lancashire there is bound to be duplication and reduplication of buildings and appliances. To have a school, like the new technical school at Manchester will be, engaged in elementary work, which could be done equally well at much less cost elsewhere, is to lose a grand opportunity of providing one center at least for advanced technical instruction, of which the country stands in growing need. Experience shows, too, that the same staff can not successfully undertake to teach crowds of elementary pupils and also really be of assistance to the comparatively few picked students who will well repay any opportunities placed in their path for advanced study and subsequent research in applied science.

That there is no difficulty in getting students to travel, as has been suggested, is borne out by an appendix to the last report of the Manchester committee for technical instruction. It is there set forth that last year there were, among the 4,313 students of the technical school, no fewer than 2,266 students from out-districts, of whom 18 came from Bolton, 25 from Bury, 44 from Oldham and Hollinwood, 16 from Rochdale, 348 from Salford, and 43 from Stockport, to name only a few towns from a long list in the report before us.—A. T. Simmons, *Nature*, Jan. 31, 1901, p. 337.

Sheffield—Increase in school provision.—In a retrospective survey of the work of the Sheffield board of education for thirty years, from November 28, 1870, to November 28, 1900, the clerk of board, Mr. John Francis Moss,¹ says:

Looking back to the time when the only education obtained by hundreds of children in Sheffield was got by fitful attendance at dame schools, some of them carried on in miserable hovels by persons who could not write simple sentences, and, indeed, not properly spell many words of one syllable, and having regard to the ample provision now made as compared with that which existed thirty years ago, one may well be thankful for the wonderful development of our educational system. Fortunately, the voluntary schools of those days did noble service, as they are doing now, but they were deplorably handicapped and the people were sadly wanting in appreciation of their value. The average attendance at efficient schools of all kinds in 1871, in Sheffield, was 11,985. The average for the year 1900 was 54,681. We roughly estimate that more than 140,000 children have passed through our board schools alone since the time we started with ten small temporary schools in January, 1872, and I will not hazard an appraisalment of the good influence which must have been exercised on the lives and characters of those who now join in ruling the destinies of this great city. I say without affectation and without fulsome flattery that Sheffield owes a deep debt of gratitude to the members of the ten successive school boards who have devoted themselves with so much zeal and self-sacrifice to the responsible and arduous duties which have devolved upon them. They have had the distinction of being pioneers in various important developments, and they have seen some of the results of their enlightened and broad-minded policy in the successes gained by those for whom adequate training was heretofore unobtainable, and who now fill important and specially useful positions. The intellectual life of the community has been quickened, the pleasures of life have been extended to greater numbers, wider views of the duties and responsibilities of citizenship have obtained, and our industrial and commercial interests have been advanced; while looking at the question from another point of view we find that juvenile crime has diminished in a remarkable degree throughout the United Kingdom, and as the schools have increased the prisons of the country have been reduced. Sheffield has fully shared in this improvement. But I must not trouble you with details further than to indicate the extent of the work in which you are directly concerned. The Sheffield school board has already accommodation in its own schools for 41,675 children and preparations have been made for further extensions. Its teaching staff (including pupil teachers and candidates on probation) numbers 1,146, and the administrative staff, 53, while there are also 66 caretakers, skilled workmen, and laborers regularly employed, making altogether 1,265 persons engaged. The board is responsible for looking after the attendance of 66,957 children on the rolls of public elementary schools, and bigger responsibilities still await us when the corporation act of 1900 comes into operation.—*School Board Chronicle*, December 8, 1900: 629.

¹ Mr. Moss has held the position of clerk to the board during the entire period of thirty years.

STATISTICS OF ELEMENTARY SCHOOLS OF ENGLAND, CURRENT AND RETROSPECTIVE.

The following statistics from official sources¹ give the principal school statistics for 1900, and also show the progress of the system from year to year:

Table IV shows the comparative growth of board and "voluntary" schools, the latter chiefly denominational, as indicated by average attendance for successive years from 1870 to 1899, inclusive. The relation is emphasized by the accompanying diagram. Table V shows the accommodation and enrollment in the different classes of schools for the years 1890-1900.

TABLE IV.—*Number of children in average attendance in public elementary day schools, board and voluntary, inspected during the year.*

Year ending Aug. 31—	Board.	Volun- tary.	Board.	Year ending Aug. 31—	Board.	Volun- tary.	Board.
			<i>Per cent.</i>				<i>Per cent.</i>
1870		1,152,389	0.9	1886	1,251,307	2,187,118	36.4
1871		1,231,434	0.9	1887	1,315,461	2,211,920	37.3
1872	8,723	1,327,432	0.7	1888	1,373,006	2,230,961	38.1
1873	69,983	1,412,497	4.7	1889	1,424,835	2,257,790	38.7
1874	138,293	1,540,466	8.2	1890	1,437,358	2,260,559	39.2
1875	227,285	1,609,895	12.4	1891	1,491,571	2,258,385	39.8
1876	323,071	1,656,502	16.5	1892	1,570,397	2,300,377	40.6
1877	427,533	1,723,150	19.9	1893	1,688,068	2,411,362	41.2
1878	559,078	1,849,119	23.2	1894	1,777,797	2,448,067	42.1
1879	669,741	1,925,254	25.8	1895	1,879,218	2,445,812	43.4
1880	769,252	1,981,064	28.0	1896	1,956,992	2,465,919	44.2
1881	856,351	2,007,184	29.9	1897	2,016,547	2,471,996	44.9
1882	945,231	2,069,920	31.3	1898	2,072,911	2,481,254	45.5
1883	1,028,904	2,098,510	32.9	1899	2,137,805	2,499,133	46.1
1884	1,115,832	2,157,292	34.1	1900	2,177,253	2,488,877	47.0
1885	1,187,455	2,183,870	35.2				

¹ Annual reports of the committee of council on education, 1870 to 1898-99, inclusive; report of the Duke of Newcastle's commission, 1861; report of the royal commission on the elementary education acts, 1888; special reports on educational subjects, education department, 1896-97; reports of the board of education, 1899-1900, 1900-1901. The retrospective tables are derived chiefly from the two last-named sources and the final report of the committee of council in education (1893-99).

TABLE IV ILLUSTRATED BY MEANS OF A CURVE DIAGRAM.

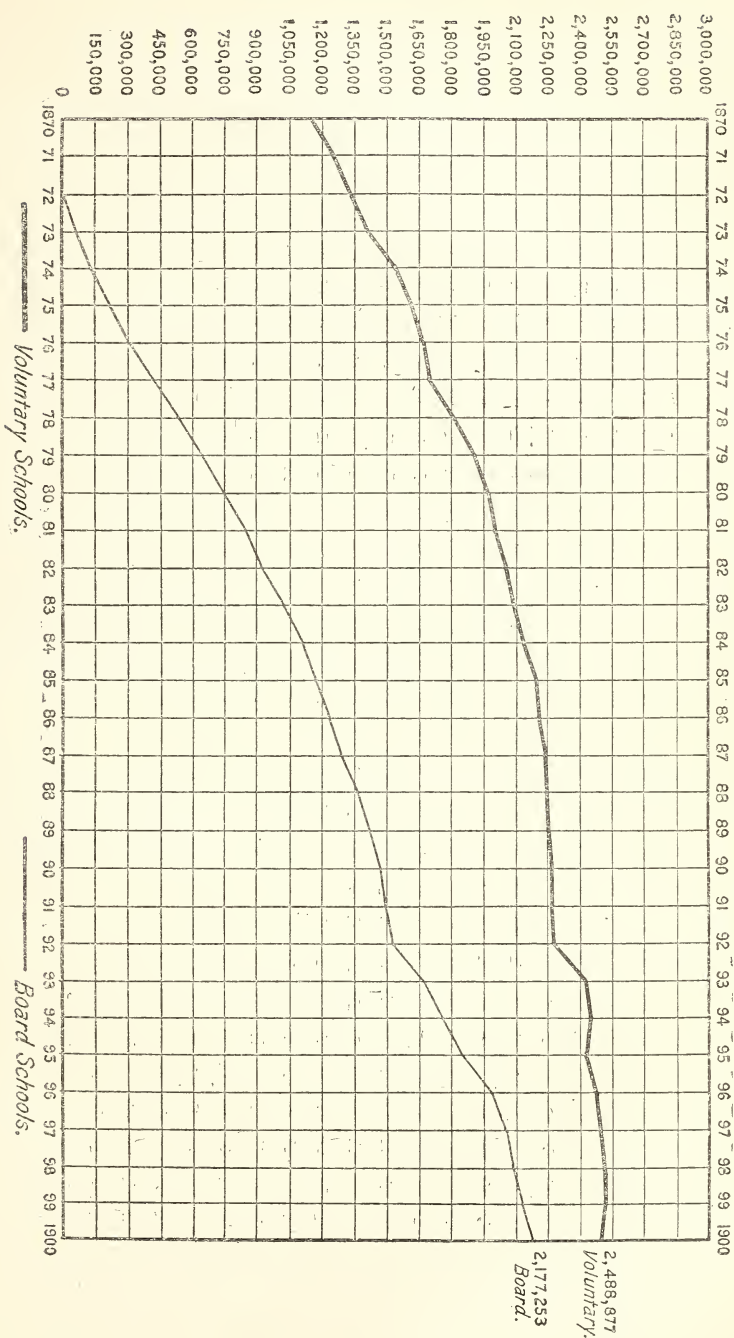


TABLE V.—*Accommodation and enrollment in the several classes of elementary schools, 1890-1900.*

Denomination.	Number of schools, i. e., institutions under separate management.	Number of departments in which separate head teachers are employed.					Number of scholars for whom accommodation is provided.	Number on roll.	Actual average number of scholars in attendance.
		Boys.	Girls.	Mixed.	Infants.	Total.			
Schools connected with National Society or Church of England	11,777	1,746	1,665	9,459	3,653	13,517	2,802,525	2,300,150	1,885,592
Wesleyan schools	458	29	23	426	235	713	132,800	156,666	125,727
Roman Catholic schools	1,045	237	226	800	522	1,785	394,659	316,762	255,036
British and other schools	1,079	155	127	800	398	1,540	331,614	269,421	220,032
Total voluntary schools	14,359	2,161	2,041	11,545	4,808	20,555	3,710,998	3,043,006	2,486,597
School-board schools	5,758	1,899	1,871	3,755	3,233	10,758	2,833,094	2,662,669	2,201,049
Grand total, 1900	20,117	4,060	3,912	15,300	8,041	31,313	6,544,092	5,705,675	4,687,646
Total, 1890	20,118	4,084	3,926	15,199	8,018	31,227	6,441,145	5,672,403	4,644,213
Total, 1898	19,937	4,086	3,896	15,061	7,868	30,911	6,316,866	5,601,249	4,544,165
Total, 1897	19,957	4,137	3,915	15,031	7,775	30,858	6,220,158	5,509,845	4,489,043
Total, 1896	19,897	4,151	3,866	14,991	7,627	30,615	6,098,669	5,443,904	4,447,179
Total, 1895	19,800	4,131	3,845	14,919	7,491	30,377	5,966,272	5,325,858	4,346,426
Total, 1894	19,756	4,152	3,837	14,859	7,321	30,169	5,873,098	5,235,887	4,254,314
Total, 1893	19,682	4,164	3,813	14,810	7,178	29,965	5,739,501	5,153,542	4,120,457
Total, 1892	19,634	4,185	3,830	14,744	7,099	29,858	5,730,888	5,037,402	3,892,989
Total, 1891	19,535	4,213	3,828	14,610	6,947	29,598	5,641,369	4,883,329	3,754,493
Total, 1890	19,498	4,218	3,829	14,560	6,861	29,468	5,566,567	4,825,560	3,732,327

TABLE VI.—*Status of school boards in 1900.*

Classification of boards.	Number.	Compulsory election.	Voluntary election.	Populations under school boards (census of 1891).
London	1	-----	1	4,228,625
County and municipal borough	197	57	140	9,747,986
Unincorporated towns and rural parishes	2,347	*1,298	1,049	6,206,372

*Of these, 205 ordered because of the closing of private schools.

TABLE VII.—*Population of England and Wales under school boards and school-attendance committees; also the population subject to by-laws until the elementary-education act of 1880 made by-laws universal.*

Year ending Apr. 1—	Total population of England and Wales.	Under school boards.		Under by-laws of school boards.		Under school-attendance committees.		Under by-laws of school-attendance committees.		Percentage of population under compulsory by-laws.
		Population.	Percentage.	Population.	Percentage.	Population.	Percentage.	Population.	Percentage.	
1872	^a 22,712,266	9,711,667	42.7	8,142,639	35.4	-----	-----	-----	-----	35.4
1873	22,712,266	9,994,582	44.0	8,926,349	39.3	-----	-----	-----	-----	39.3
1874	22,712,266	10,494,507	46.2	9,442,744	41.5	-----	-----	-----	-----	41.5
1875	22,712,266	11,647,998	51.2	9,856,041	43.3	-----	-----	-----	-----	43.3
1876	22,712,266	12,522,537	55.1	10,467,615	46.0	-----	-----	-----	-----	46.0
1877	22,712,266	12,829,831	56.4	11,221,363	49.4	-----	-----	-----	-----	49.4
1878	22,712,266	12,994,977	57.2	11,914,946	57.0	9,717,289	42.7	1,702,639	7.4	59.5
1879	22,712,266	13,150,219	57.8	12,395,550	54.5	9,562,047	42.1	3,083,609	13.5	68.1
1880	22,712,266	13,192,722	58.0	12,606,453	55.5	9,519,544	41.9	3,665,705	16.1	71.6
1881	22,712,266	13,318,492	58.6	12,318,492	58.6	9,396,744	41.3	9,333,744	41.3	100.0
1882	22,712,266	13,422,630	59.0	-----	-----	9,239,636	40.9	-----	-----	100.0
1883	^b 25,974,439	15,980,403	61.5	-----	-----	9,994,036	38.4	-----	-----	100.0
1884	25,974,439	16,081,618	61.9	-----	-----	9,892,821	38.0	-----	-----	100.0
1885	25,974,439	16,153,855	62.1	-----	-----	9,820,584	37.8	-----	-----	100.0
1886	25,974,439	16,256,554	62.5	-----	-----	9,717,885	37.4	-----	-----	100.0
1887	25,974,439	16,284,451	62.7	-----	-----	9,689,988	37.2	-----	-----	100.0
1888	25,974,439	16,313,997	62.8	-----	-----	9,660,442	37.1	-----	-----	100.0
1889	25,974,439	16,413,395	63.1	-----	-----	9,561,044	36.8	-----	-----	100.0
1890	25,974,439	16,481,753	63.4	-----	-----	9,492,686	36.5	-----	-----	100.0
1891	25,974,439	16,580,279	63.8	-----	-----	9,394,160	36.1	-----	-----	100.0
1892	25,974,439	16,614,432	63.9	-----	-----	9,360,007	36.0	-----	-----	100.0
1893	^c 29,002,525	19,199,335	66.1	-----	-----	9,866,190	33.8	-----	-----	100.0
1894	29,002,525	19,620,379	67.6	-----	-----	9,382,146	32.3	-----	-----	100.0
1895	29,002,525	19,760,433	68.1	-----	-----	9,242,092	21.8	-----	-----	100.0
1896	29,002,525	19,830,388	68.3	-----	-----	9,172,137	31.6	-----	-----	100.0
1898	29,002,525	19,979,924	68.8	-----	-----	9,022,601	31.2	-----	-----	100.0
1899	^d 29,002,525	^d 20,067,477	69.1	-----	-----	8,955,043	30.8	-----	-----	100.0
1900	29,002,525	20,142,993	69.2	-----	-----	^e 8,859,532	30.8	-----	-----	100.0

^a Census of 1871.^b Census of 1881.^c Census of 1891.

This census is the latest that has been taken. It is estimated that the census for 1901 will show a much larger population under school boards than that shown for 1900.

^d This population is under the jurisdiction of 2,527 school boards, viz, the London school board, 193 municipal borough boards, and 2,333 parish boards.^e This population is under the jurisdiction of 788 school-attendance committees, viz, 117 in municipal boroughs, 92 in urban districts, and 579 in unions.

The board of education has issued summaries of the "standards of exemption" in England and Wales, the last issue being for 1900. The following are the essential facts:

TABLE VIII.—*The standards (grades) of exemption.*

I. Local authorities fixing for half time:	
Standard II	121
Standard III	1,180
Standard IV	1,462
Standard V	177
II. For full time:	
Standard IV	886
Standard V	2,003
Standard VI	363
Standard VII	72

The advance since 1897 is indicated by the following:

	1897.	1900.
Local authorities fixing for full time:		
Standard IV	1,209	886
Standard V	1,843	2,006
Standard VI	140	363
Standard VII	4	72

The latest measures affecting school attendance are explained as follows in the Report of the Board of Education for 1900-1901.

The elementary-education (school attendance) act, 1899, was followed last year by the elementary-education act, 1900, which introduced further changes into the law of school attendance. It enabled school authorities to extend their by-laws so as to include children up to the age of 14, raised the penalties that could be inflicted on parents from 5s. to 20s., and increased the number of attendances required for exemption by the elementary-education act, 1876, from 250 to 350. The law of school attendance under the elementary-education acts, as it now stands, may be summarized as follows:

(1) If the by-laws contain a special provision to this effect, children may be employed in agriculture at the age of 11, provided that they attend school 250 times a year up to the age of 13.

(2) With this exception, no child subject to the by-laws can obtain either partial or total exemption under the age of 12.

(3) A child between 12 and 13, or (if the by-laws are extended) between 12 and 14, can only obtain total or partial exemption on the conditions prescribed by the by-laws.

(4) In districts where the by-laws are still restricted to children of 13 years of age a child between 13 and 14 can obtain total exemption either on passing the fourth standard, or on making 350 previous attendances after 5 years of age in not more than two schools during each year for five years.

(5) A child between 12 and 14 may claim partial exemption on making 300 previous attendances, but in the view of the board this exemption can only be claimed in cases where the by-laws themselves contain a provision for partial exemption.

Since the passing of the act school authorities have been actively engaged in revising their existing by-laws, and some 1,300 new sets of by-laws have been either finally or provisionally approved by the board. In all these cases the board has secured the adoption of at least the fifth standard for total exemption, and with a very few exceptions of at least the fourth standard for partial exemption. The local authorities have, as a rule, availed themselves of the power to extend the age limit to 14, only some 150 having up to the present time declined to do so. The "agricultural" by-law has been adopted in about 500 cases, principally, of course, in rural districts. The process of by-law revision is still being actively proceeded with, and it is hoped that within another year the by-laws throughout the country may become adapted to recent legislation.

TABLE IX.—*Expenditure on public elementary education (England and Wales), 1871-1895 (current and capital).*

Year.	(a) Paid from rates (local taxes board schools only).	(b) Voluntary subscrip- tions and income from endowments.	(c) Total of columns (a) and (b).	(d) Fees of scholars in elementary schools and students in training colleges.	(e) Total of columns (a), (b), and (d).	(f) School board loans for building pur- poses. ^a	(g) Estimated subscrip- tions for voluntary school buildings.	(h) Grand total of col- umns (a), (b), (d), (f), and (g).	(i) State expenditure (education depart- ment and science and art depart- ment).
1871.....	£71,184	£569,262	£580,446	£546,421	£1,126,867	£600	£441,201	£1,568,668	£927,524
1872.....	162,491	581,014	743,505	607,692	1,351,197	63,487	441,201	1,855,885	1,117,878
1873.....	251,906	612,650	894,556	699,597	1,594,153	861,458	441,201	2,896,812	1,243,851
1874.....	373,859	709,712	1,083,571	826,244	1,909,815	1,539,111	441,201	3,890,127	1,341,089
1875.....	588,845	799,387	1,388,232	948,120	2,336,352	1,495,989	441,201	4,213,542	1,496,471
1876.....	868,418	678,757	1,747,175	1,049,892	2,797,067	1,462,956	441,201	4,701,224	1,692,353
1877.....	1,108,316	920,564	2,028,880	1,154,909	3,183,789	1,821,350	441,201	5,446,320	1,897,539
1878.....	1,323,275	918,390	2,241,665	1,292,615	3,539,280	1,500,163	441,201	5,480,644	2,191,017
1879.....	1,486,250	913,550	2,399,800	1,392,289	3,792,089	1,083,626	441,201	5,316,926	2,348,704
1880.....	1,579,752	905,612	2,485,364	1,452,792	3,938,156	1,090,258	441,201	5,469,615	2,529,572
1881.....	1,772,563	897,272	2,669,835	1,530,929	4,200,471	982,154	441,201	5,623,826	2,636,936
1882.....	1,837,566	893,790	2,731,356	1,607,888	4,339,250	975,245	441,201	5,755,696	2,824,462
1883.....	1,990,162	891,346	2,881,508	1,684,087	4,565,595	850,051	441,201	5,856,847	2,866,200
1884.....	2,207,806	913,525	3,121,331	1,759,289	4,880,620	1,171,288	441,201	6,493,169	3,135,843
1885.....	2,354,066	933,959	3,287,965	1,818,579	5,106,544	1,198,364	441,201	6,746,109	3,285,227
1886.....	2,545,492	917,080	3,462,572	1,849,382	5,302,954	691,601	441,201	6,435,756	3,476,633
1887.....	2,641,593	923,985	3,565,539	1,862,042	5,427,581	490,462	441,201	6,299,244	3,511,654
1888.....	2,631,433	932,403	3,563,836	1,890,537	5,454,373	401,114	441,201	6,296,688	3,606,888
1889.....	2,666,264	941,748	3,608,012	1,932,607	5,540,619	574,828	441,201	6,556,648	3,684,192
1890.....	2,968,066	945,114	3,913,210	1,969,032	5,882,242	377,397	441,201	6,700,840	3,741,351
1891.....	3,331,473	952,113	4,293,586	2,009,676	6,294,262	574,064	441,201	7,309,527	4,185,132
1892.....	3,462,356	980,342	4,442,698	1,320,405	5,763,103	949,076	441,201	7,153,380	5,032,366
1893.....	3,619,167	960,012	4,609,179	393,261	5,002,440	914,539	441,201	6,358,180	6,495,841
1894.....	3,732,342	969,553	4,721,895	360,550	5,082,425	1,557,885	441,201	7,081,511	6,659,969
1895.....	3,987,790	1,000,993	4,988,783	342,900	5,331,683	1,869,362	441,203	7,642,246	6,563,279
1900.....	5,557,537	-----	-----	-----	-----	-----	-----	-----	8,973,871
Total.	49,567,066	21,892,146	71,459,212	32,283,715	103,742,927	24,376,418	11,020,027	130,149,372	79,895,702

^a The law of 1870 authorized school boards to borrow money on the security of local taxes (rates) for the building of schoolhouses. Up to the 1st of April, 1901, the education department had sanctioned loans to the amount of £41,324,464 (£308,122,320). The new accommodation thus furnished is sufficient for 2,788,120 children. The estimated cost per child is thus about £14 18s. 7d. (£73). The department has also sanctioned loans to the amount of £132,993 to 10 school boards for providing accommodation for 729 blind and deaf children, and also £23,818 18s. to 5 school boards for providing accommodation for 390 defective children.

PROPORTION OF TOTAL EXPENDITURE WHICH FELL (a) ON THE CENTRAL FUNDS OF THE STATE, (b) ON OTHER SOURCES OF REVENUE.

Year.	State.	Other sources of income.	Year.	State.	Other sources of income.	Year.	State.	Other sources of income.
1871.....	37.16	62.84	1886.....	35.08	64.92	1893.....	50.54	49.46
1876.....	25.89	74.11	1891.....	36.41	63.59	1894.....	48.44	51.56
1881.....	31.93	68.07	1892.....	46.60	54.00	1895.....	47.68	52.32

TABLE X.—Average expenditure (on maintenance only) per scholar in average attendance.

Year ending August 31.	Board schools.	Voluntary schools.	Year ending August 31.	Board schools.	Voluntary schools.
	£. s. d.	£. s. d.		£. s. d.	£. s. d.
1870.....		1 5 5	1886.....	2 4 11½	1 16 4½
1871.....		1 5 6½	1887.....	2 4 7½	1 16 4½
1872.....	1 8 4½	1 7 5	1888.....	2 4 7½	1 16 4
1873.....	1 14 5½	1 9 11½	1889.....	2 4 6½	1 16 4½
1874.....	1 15 4½	1 10 10½	1890.....	2 5 11½	1 16 11½
1875.....	1 16 11	1 11 10½	1891.....	2 7 1½	1 17 8
1876.....	2 1 4½	1 13 5½	1892.....	2 8 4½	1 17 9½
1877.....	2 1 4½	1 13 9	1893.....	2 8 1½	1 17 6½
1878.....	2 1 9½	1 14 0	1894.....	2 8 9½	1 18 1½
1879.....	2 2 0½	1 14 6	1895.....	2 10 1½	1 18 11½
1880.....	2 1 11½	1 14 7½	1896.....	2 11 11½	1 19 6½
1881.....	2 1 6	1 14 11½	1897.....	2 13 2½	2 0 6
1882.....	2 1 6½	1 14 6½	1898.....	2 13 9½	2 2 4½
1883.....	2 1 3½	1 14 10½	1899.....	2 15 7	2 5 1½
1884.....	2 1 8½	1 15 2	1900.....	2 17 8	2 6 5
1885.....	2 5 4	1 15 9½			

TABLE XI.—Comparative view of income for maintenance only, day and evening schools, 1894-1900.

Classification of sources.	Total local sources.		Total Government grants.	
	1894.	1900.	1894.	1900.
National Society, or Church of England.....	£958,485	£937,609	£2,613,956	£3,407,479
Wesleyan.....	59,488	53,897	191,647	233,450
Roman Catholic.....	96,994	93,835	309,903	462,492
British and other schools.....	153,891	169,710	355,603	427,701
Board schools.....	1,826,071	3,078,954	2,612,140	3,474,799
Total.....	3,094,929	4,334,009	6,083,249	8,002,978

TABLE XII.—The central exchequer grants.—The total of the exchequer grant for the year ended December 31, 1900, was £8,973,871 11s. 9d. The following table shows how this amount was allocated and a contrast with last year:

	For year ended December 31, 1900.	Compared with year ended December 31, 1899.	
		Increase.	Decrease.
1. Annual grants for day and evening scholars:			
Day.....	£ s. d. 5,095,929 12 9	£ s. d. 360,956 4 8	£ s. d.
Evening.....	195,641 14 2	14,303 10 10	.....
2. Fee grants for day scholars.....	2,541,812 16 4	31,047 17 2	.....
3. Grants for blind and deaf children.....	19,840 4 0	745 18 9	.....
4. Grants to school boards under act 33 and 34 Vict., c. 75, s. 97.....	205,865 14 0	38,581 7 4	.....
5. Annual grants to training colleges.....	195,344 16 11	16,867 3 6	.....
6. Pensions and gratuities to teachers.....	47,711 1 11	8,820 3 4	.....
7. Administration:			
Office in London.....	82,441 15 2		
Inspection.....	210,096 13 2		
Contingencies of office.....	1,663 6 9		
8. Organization of districts, etc., under act 33 and 34 Vict., c. 75.....	749 11 10	79 18 1	.....
9. Special inquiries.....	.....	.....	39 4 0
10. Aid grant.....	576,760 4 9	.....	221,499 10 1
11. Refund of cost of training recovered from teachers.....	.....	.....	79 8 11
Total.....	8,973,871 11 9	471,951 1 0	221,618 3 0

TABLE XIII.—*Number of teachers in public elementary day schools.*

	Year ending Aug. 31—							
	1870.	1875.	1880.	1885.	1890.	1895.	1899.	1900.
Certificated teachers:								
Men—								
Trained		7,548	9,546	11,287	12,770	15,023	17,436	17,651
Untrained		2,284	3,975	5,025	5,934	6,200	6,817	6,903
Total	6,395	9,832	13,521	16,313	18,704	21,223	24,253	24,557
Women—								
Trained		7,324	9,347	11,371	12,873	15,616	18,584	19,317
Untrained		3,787	8,554	13,022	14,962	16,102	19,248	20,164
Total	6,072	11,111	17,901	24,393	27,835	31,718	37,832	39,481
Assistant teachers:								
Men	487	984	2,681	5,104	5,254	5,047	4,725	5,121
Women	775	1,729	4,971	11,514	16,530	22,914	29,508	27,315
Pupil teachers (including probationers): ^a								
Boys	6,334	10,842	10,822	7,625	7,695	7,246	6,643	6,035
Girls	8,228	18,403	21,306	20,113	23,467	26,757	26,706	24,956
Additional teachers, women			2,352	4,292	5,210	11,678	16,717	17,512
Total men	13,266	21,656	27,024	29,042	31,653	33,516	35,621	35,713
Total women ^b	15,775	31,243	46,530	60,312	73,042	96,067	106,703	109,266
Total	29,041	52,899	73,554	89,354	104,695	129,583	142,384	144,979
Per cent of men	45.68	41	36.74	32.5	30.23	26.46	25.01	24.7

^a Year ending Dec. 31 for years 1870, 1875, and 1880.^b Including pupil teachers and probationers, the latter numbering 2,653 in 1899 are not included in number of teachers given in Tables I and XIV.TABLE XIV.—*Proportion of each class of teachers to the total number.*

Year.	Certificated teachers.	Assistant teachers.	Pupil teachers, including probationers.	Total. ^a	Percentage of total teachers. ^a		
					Certificated.	Assistant.	Pupil.
1870	12,467	1,262	14,612	28,341	44.0	4.4	51.6
1875	20,940	2,713	29,245	52,898	39.6	5.1	55.3
1880	31,442	7,652	32,128	71,202	44.1	10.8	45.1
1885	40,706	16,618	27,738	85,062	47.9	19.5	32.6
1890	46,539	21,784	31,162	99,485	46.8	21.9	31.3
1895	52,941	27,961	34,006	115,905	46.1	24.3	29.6
1899	62,085	30,233	33,349	125,667	49.4	24.1	26.5
1900	64,058	32,436	30,991	127,465	52.5	31.3	16.2

^a Not including additional women teachers first employed in 1880.TABLE XV.—*Average annual salaries of certificated teachers.*

Year.	Masters.					Mistresses.				
	Average salary of—			Percentage in receipt of salaries over £300.		Average salary of—			Percentage in receipt of salaries over £200.	
	Principal teachers.	Assistant teachers.	All teachers.	Principal.	All teachers.	Principal teachers.	Assistant teachers.	All teachers.	Principal.	All teachers.
1870			£94					£57		
1875			109					65		
1880			121					73		0.51
1885	£132	£90	121	2.11	1.50	£79	£63	74	2.05	1.34
1890	134	90	130	2.95	2.01	83	66	76	2.75	1.68
1895	138	98	122	3.21	1.97	88	73	81	3.51	1.93
1899	144	102	125	3.54	1.97	94	76	84	3.95	1.85
1900	145.7			3.6	1.9	95.7			4.1	1.9

TABLE XVI.—*Students in residence and in day training colleges.*^a

Year.	College.	Men.	Women.	Total.
1870-71	Residential	1,112	1,203	2,315
1900-1901	do	1,488	2,597	^b 4,253
	Day	630	893	1,355
Total		2,118	3,490	5,608
Increase in 29 years.....		106	2,287	3,293

^a Day training colleges were first opened in 1890.^b Includes 168 day students.TABLE XVII.—*Comparison of the last ten years with 1870 and 1876.*

	Year ending Aug. 31—				
	1870 (Revised Code).	1876.	1890.	1891.	1902.
Schools (institutions) inspected by Her Majesty's inspectors	8,231	14,273	19,419	19,508	19,515
Voluntary schools	8,231	12,677	14,743	14,761	14,684
Board schools		1,596	4,676	4,747	4,831
Departments under separate head teachers in those schools	12,061	20,782	29,339	29,533	29,672
Scholars for whom accommodation is provided	1,878,584	3,426,318	5,539,285	5,628,201	5,692,975
Percentage to estimated population	8.50	14.13	18.84	19.35	19.36
Scholars on the school registers	1,693,059	2,943,774	4,804,119	4,824,683	5,006,979
Percentage to estimated population	7.66	12.08	16.34	16.59	17.03
Scholars in actual average attendance ^a	1,152,389	1,984,573	3,717,917	3,749,956	3,870,774
Percentage to estimated population	5.21	8.10	12.64	12.89	13.16
Percentage to scholars on the school registers	68.06	67.42	77.39	77.72	77.81
Average attendance for payment in infant schools and classes			1,167,805	1,121,990	1,180,782
Average attendance for payment in schools for older scholars			2,632,731	2,650,960	2,712,969
Average attendance of scholars who earned grants upon examination in class subjects			2,492,918	2,521,974	2,595,127
Scholars qualified for grant in specific subjects			78,611	90,087	90,070
Number of departments in which singing was taught:					
By ear		16,823	13,054	11,633	10,623
By notes		3,815	16,227	17,645	18,996
Number of schools in which were taught—					
Military drill		1,056	1,414	1,365	1,352
Manual instruction				145	285
Science				420	513
Physical exercises				1,441	1,703
Half-time scholars		201,284	175,437	173,040	172,363
School libraries			4,401	4,967	5,560
Savings banks			2,498	2,629	6,383
Certificated and provisionally certificated teachers ^b	12,467	23,053	46,539	47,823	48,772
Assistant teachers	1,232	3,173	21,784	23,508	23,558
Additional teachers		543	5,210	5,681	6,951
Pupil teachers	14,304	32,231	29,610	28,131	26,961
"Annual grant"	£562,611	£1,316,864	£3,326,177	£3,434,759	£3,561,330

^a In Table II will be found separately the average attendance in board and voluntary schools.^b Men teachers and women teachers are given separately in Table XIII.

TABLE XVII.—Comparison of the last ten years with 1870 and 1876—Continued.

	Year ending August 31—			
	1893.	1894.	1895.	1896.
Schools (institutions) inspected by Her Majesty's inspectors	19,577	19,709	19,739	19,848
Voluntary schools	14,673	14,628	14,479	14,416
Board schools	4,604	5,081	5,260	5,432
Departments under separate head teachers in those schools	29,804	30,083	30,237	30,521
Scholars for whom accommodation is provided	5,762,617	5,832,944	5,937,288	6,072,374
Percentage to estimated population	19.38	19.44	19.53	19.71
Scholars on the school registers	5,126,373	5,198,741	5,299,469	5,422,989
Percentage to estimated population	17.24	17.29	17.43	17.60
Scholars in actual average attendance ^a	4,100,030	4,225,834	4,325,030	4,422,911
Percentage to estimated population	13.79	14.03	14.23	14.35
Percentage to scholars on the school registers	79.98	81.29	81.61	81.55
Average attendance for payment in infant schools and classes	1,276,302	1,318,478	1,333,680	1,370,392
Average attendance for payment in schools for older scholars	2,846,549	2,926,629	3,008,798	3,070,550
Average attendance of scholars who earned grants upon examination in class subjects	2,752,261	2,884,196	2,980,948	3,052,692
Scholars qualified for grant in specific subjects	100,120	113,384	128,012	138,814
Number of departments in which singing was taught:				
By ear	9,655	8,690	7,892	7,204
By notes	20,106	21,300	22,302	23,280
Number of schools in which were taught—				
Military drill	1,346	1,843	1,572	1,903
Manual instruction	430	677	949	1,178
Science	557	573	632	783
Physical exercises	1,938	2,259	3,185	5,333
Half-time scholars	164,018	140,831	126,896	119,747
School libraries	5,832	6,225	6,381	6,550
Savings banks	8,548	8,668	8,410	8,065
Certificated and provisionally certificated teachers ^b	49,340	50,689	52,941	56,712
Assistant teachers	25,123	26,067	27,961	25,393
Additional teachers	8,534	10,196	11,678	12,838
Pupil teachers	27,288	28,739	31,476	33,529
"Annual grant"	£3,783,237	£3,925,641	£4,081,281	£4,217,566

	Year ending August 31—			
	1897.	1898.	1899.	1900.
Schools (institutions) inspected by Her Majesty's inspectors	19,958	19,937	20,004	20,160
Voluntary schools	14,434	14,382	14,432	14,409
Board schools	5,524	5,555	5,632	5,691
Departments under separate head teachers in those schools	30,847	30,911	31,173	31,234
Scholars for whom accommodation is provided	6,215,199	6,316,866	6,417,514	6,509,611
Percentage to estimated population	20.01	20.11	20.21	20.23
Scholars on the school registers	5,507,039	5,576,865	5,654,092	5,686,114
Percentage to estimated population	17.73	17.76	17.81	17.71
Scholars in actual average attendance ¹	4,488,543	4,554,165	4,636,938	4,666,130
Percentage to estimated population	14.45	14.50	14.60	14.53
Percentage to scholars on the school registers	81.50	81.66	82.01	82.06
Average attendance for payment in infant schools and classes	1,391,091	1,428,321	1,476,309	1,478,211
Average attendance for payment in schools for older scholars	3,117,469	3,148,851	3,195,671	3,230,236
Average attendance of scholars who earned grants upon examination in class subjects	3,107,051	3,143,618	3,192,794	3,227,985
Scholars qualified for grant in specific subjects	156,314	175,689	346,301	330,815
Number of departments in which singing was taught:				
By ear	6,536	5,899	5,250	4,577
By notes	24,284	24,991	25,991	26,638

^a In Table II will be found separately the average attendance in board and voluntary schools.

^b Men teachers and women teachers are given separately in Table XIII.

TABLE XVII.—*Comparison of the last ten years with 1870 and 1876—Continued.*

	Year ending August 31—			
	1897.	1898.	1899.	1900.
Number of schools in which were taught—				
Military drill	2,418	2,555	2,650	2,838
Manual instruction	1,274	1,335	1,587	1,708
Science	901	951	1,075	1,229
Physical exercises	7,845	8,560	9,115	9,675
Half-time scholars	110,654	103,678	95,621	89,036
School libraries	7,066	7,368	7,875	8,114
Savings banks	7,489	7,393	7,337	7,133
Certificated and provisionally certificated teachers ^a	58,814	59,874	62,085	64,038
Assistant teachers	25,206	26,736	30,233	32,436
Additional teachers	14,155	15,136	16,717	17,512
Pupil teachers	32,598	31,038	30,783	29,393
"Annual grant"	£4,339,739	£4,554,932	£4,835,055	£4,911,239

^a Men teachers and women teachers are given separately in Table XIII.^b Annual grant only. The total grant from the public treasury, including fee grant and special grants, amounted to £12,524,508.TABLE XVIII.—*Comparative statistics of education in Scotland.*

	Years.			
	1872.	1880.	1890.	1900.
Estimated population	3,395,802	3,705,314	4,109,275	4,324,944
Number of schools	1,979	3,064	3,076	3,135
Departments:				
Day	2,133	3,377	3,465	3,592
Higher grade				31
Evening continuation	68	277	191	552
Accommodation:				
Day schools	281,638	602,054	714,865	893,842
Higher grade				9,292
Evening continuation schools (not connected with day schools)		1,361	420	5,064
Number on the registers:				
Day schools		534,428	664,466	753,287
Higher grade schools				3,271
Evening continuation schools		20,279	16,524	82,190
Average attendance:				
Day scholars	213,549	404,618	512,690	626,089
Higher grade scholars				2,940
Evening continuation scholars	3,653	14,237	11,636	43,962
Number of teachers:				
Certificated	2,566	5,330	7,745	10,845
Assistant		444	1,320	2,418
Pupil	3,642	4,582	3,883	3,926
Queen's scholars in training colleges	729	892	861	1,250
Queen's students				110
Current expenditures		\$4,122,879		* \$7,436,752

* For day schools only.

SECONDARY EDUCATION IN ENGLAND AND SCOTLAND.

A.—ENGLAND.

Secondary, or, as it is sometimes termed, middle-class education in England is unorganized, and there are no complete statistics of schools of this grade. The report of the Royal Commission on Secondary Education (1894) followed provisionally the classification of schools adopted by the previous commission of 1864. The latter body "distinguished three grades of secondary schools, according to the age up to which the pupils normally remain at school. For the first grade this age is 18 or 19; for the second grade, 16 or 17; for the third grade, 14 or 15." The

schools of each grade were further distinguished by their mode of support as endowed, proprietary, and private.

During the century just closed the Government made repeated efforts to deal with the endowed schools. In 1853 a law was passed which constituted a charity commission to inquire into the condition and management of charities and to frame schemes for their proper administration. Educational endowments were thus brought under supervision, and as a final result the endowed schools' law was passed in 1865, under which the administration of many educational endowments has been reorganized.

Several royal commissions were also appointed during the last half of the nineteenth century to investigate specified classes of secondary schools. The first of these was Lord Clarendon's commission, 1861, to inquire into the nine leading public schools; that is, as defined by Mr. Balfour, "schools of the order which, receiving the sons of the higher and wealthier classes of the country, have sent the largest proportion of pupils to the universities and adhered more exclusively to a classical education. Seven of the schools—Eton, Winchester, Westminster, Charterhouse, Harrow, Rugby, and Shrewsbury—were boarding schools. The youngest of them, Charterhouse, had been in existence since the beginning of the seventeenth century; the oldest, Winchester, since 1357. In 1861 they were educating 2,696 boys." Mr. Balfour adds in a footnote: "In 1897 they had nearly 5,000 boys, and the whole of the schools of about the same caliber in England admitted to the Headmaster's Conference, about 90 in number, had 24,000 pupils, including these 5,000."¹

In 1864 a commission was appointed under Lord Taunton to inquire into the education given in secondary schools which were included neither in the preceding commission nor in the Newcastle (elementary schools) commission of 1859. In 1867 Lord Taunton's commission presented a very comprehensive report. The total number of endowed schools that came within the scope of their inquiry was 820, of which 572 were endowed secondary grammar schools. The number of scholars in these schools, excluding 198 that had become purely elementary, was nearly 40,000. The report also included 86 proprietary schools for boys and 36 for girls. The commissioners devoted a separate chapter of their report to the secondary education for girls, which they found to be in a very backward state. "The effect produced by this revelation," says Mr. Balfour, "was so great and gave so much impetus and so much support to those who were devoting themselves to this work that within ten years' time endowments had been provided for 45 new schools for girls, containing from 50 to 400 pupils each. The Girls' Public Day School Company, founded in 1873 on a business basis, had 34 schools in 1897, with 7,150 pupils."²

The commission of 1894, of which Mr. Bryce was chairman, was appointed to consider "what are the best methods for establishing a well-organized system of secondary education in England, taking into account existing deficiencies and having regard to such local sources of revenue from endowment or otherwise as are available or may be made available for this purpose." Their report, in nine volumes, was presented in 1895. No attempt at any complete enumeration of secondary schools was made by the commission, but the education department ten years later undertook a voluntary census of all schools in England (omitting Monmouthshire, which comes under the Welsh intermediate education act of 1889) between the public elementary schools and the universities and university colleges.

In the arrangement of the information thus obtained it was found difficult to classify the schools according to grade or efficiency; they were consequently

¹ Educational Systems of Great Britain and Ireland, by Graham Balfour, p. 157.

² Educational Systems of Great Britain and Ireland, p. 160.

grouped in five classes, according to the constitution of their controlling authorities, as shown in the following table:

Form of control.	Schools for boys.		Schools for girls.		Mixed schools.	
	Number of schools.	Boys in them.	Number of schools.	Girls in them.	Number of schools.	Pupils in them.
Private enterprise.....	1,311	46,617	2,886	80,236	970	26,027
Subscribers.....	70	8,719	99	6,321	28	3,626
Companies.....	48	5,188	99	13,238	3	308
Endowed, etc.....	502	59,517	86	14,119	31	3,035
Local authority.....	27	2,272	3	275	46	6,996

(5) The above table may also be given in percentages, as follows:

	Percentage of total.		Percentage of total.		Percentage of total.	
	Number of schools.	Number of boys.	Number of schools.	Number of girls.	Number of schools.	Number of pupils.
Private enterprise.....	66.9	38.1	91	70.3	90.1	65.3
Subscribers.....	3.6	7.1	3.1	5.5	2.6	9
Companies.....	2.5	4.2	3.1	11.6	.3	.7
Endowed, etc.....	25.6	48.6	2.7	12.3	2.7	7.5
Local authority.....	1.4	1.8	.1	.2	4.1	17.4

The following table shows the classification of the pupils by age periods:

Ages.	Boys.	Girls.	Percentage of total.	
			Boys.	Girls.
Under 12.....	64,329	60,866	40.6	45.7
Between 12 and 16.....	79,259	57,040	50	42.9
Over 16.....	14,804	15,136	9.3	11.3
Total.....	158,502	133,042	.....	.....

No pupils were included in this return for whom grants were claimed from the education department or who might only be receiving instruction in occasional classes or evening schools. Students at universities, university colleges, and technical institutes (except so far as regarded secondary day schools conducted in the buildings otherwise devoted to technical instruction) were also excluded from the return.

The public authorities connected with secondary education up to the establishment, in 1899, of the board of education were: (1) The charity commissioners, whose jurisdiction was limited to dealing with endowments in England and Wales. (2) The department of science and art, through which Government aid was extended to science and art schools and classes. (3) The education department, whose statutory connection with secondary education extended simply to the approval or disapproval of schemes for endowed schools submitted by the charity commissioners. The influence of the department upon the development of secondary education has not, however, been limited to this slight relation with the endowed schools. It has been a growing and forceful influence through the recognition accorded to higher grade classes and schools in connection with the elementary schools and also from the authority to distribute Government grants to university colleges and training colleges (normal schools). (4) The board of agriculture, which by the law creating it (1889) was authorized to inspect and report upon "any school (not being a public elementary school) in which technical education, practical or scientific, is given in any subject connected with agriculture (including horticulture) and forestry."

The functions of these various Government agencies are now merged in the board of education.

The local authorities, county councils, and county borough councils are brought into relation with secondary education by powers given them under the Technicians instruction laws (see pp. 942, 943).

The following particulars relating to secondary education are from the report of the board of education for 1900:

The total number of students who received, under the board, science or art instruction in science classes or schools of art and art classes, and scientific and general instruction in schools of science, was 292,111, and the total number of schools or institutions in which such instruction was given was 2,330. The grants paid amounted to £279,286 7s. (\$1,357,331.)

Scotland is included in the above statistics.

For inspection and examination of secondary schools in Wales and Monmouthshire there is, under the Welsh intermediate education acts of 1889, an intermediate education board of 80 members, appointed by the councils of the counties and county boroughs, the school-governing bodies, and other bodies interested. The number of schools examined in 1893 was 88, being 20 for boys, 20 for girls, 41 dual, and 7 mixed. The permanent teaching staff numbered 408 (219 male and 189 female) exclusive of 173 visiting teachers. The number of pupils examined was 6,912, of whom 3,274 were girls. * * *

Under acts passed in 1889-1891 funds may be applied by local authorities in England and Wales to technical instruction. The amount so applied in England in 1897-98 was £759,400 (about \$3,797,000) and in Wales £40,062 (about \$200,310). In some cases local authorities expend the money directly in providing instruction, but usually they make grants to schools and other institutions, or provide scholarships or other assistance for successful students. The instruction includes science, art, and technical and manual instruction; in Wales it embraces also secondary education.

B—SECONDARY EDUCATION IN SCOTLAND.

In view of the confused state of secondary education in England and the recent action with respect to the higher-grade board schools, it is interesting to note the liberal policy in respect to such schools pursued by the department of education for Scotland and the progress made in coordinating the various classes of secondary schools, as stated in the brief outline of education in Scotland (p. 943). The law of 1872 made provision for secondary schools, and subsequent laws authorized their support from local taxes. The secondary schools of Scotland have been brought into relation with the department by the inspection service, and the leaving examination, and great progress has been made in systematizing and coordinating the agencies of secondary education under private, and those under public management.

With respect to this work the Scotch education department in their report for 1900-1901 make the following statement:

The lines of organization of secondary education in day schools are fixed by the education act (Scotland) of 1872, which distinguishes between those public or other schools which may share in the Parliamentary grant, and those others defined in the act as "higher-class schools," which may not. It has been thought more in accordance with sound administration that all forms of instruction in the former class of schools should be aided from the Parliamentary grant, and accordingly in the code of 1899 and succeeding codes provision has been made for the payment of very substantial grants, obtained in part from the commutation of science and art grants formerly paid to these schools, on account of the instruction of the pupils who by obtaining the merit certificate (offered on the completion of an elementary course), have shown their fitness for more advanced instruction. In very few of these schools do the pupils remain beyond the age of 15 years, and regard must be had in framing a curriculum for the advanced departments of these schools to this circumstance, as well as to the fact that a very considerable proportion of these pupils will on leaving school follow occupations of an industrial or commercial nature. Great stress has accordingly been laid on the teaching of science, drawing, and modern languages in such schools, in comparison with subjects which, although intellectually valuable, are less likely to be of practical use to pupils who will leave school at a comparatively early age. Further, it has been thought that the teaching of science should consist rather in

the experimental investigation of fundamental principles than in detailed study of some special branch, while in the teaching of such subjects as arithmetic, drawing, and languages, opportunities of practical application should be constantly in view. But considerable freedom will be left to managers to adapt curriculums to special schools, and the grant will be paid on a satisfactory completion of the curriculum as a whole, and not according to the number of separate subjects which may be taken up.

Higher-class schools are, as already stated, not eligible to share in the Parliamentary grant, but some of them have, in the past, been in receipt of considerable sums of varying amount from the science and art vote on account of instruction in a variety of special subjects according to syllabuses of the science and art directory (issued by the education department). Certain others have received aid from this vote in a different form, namely, as schools of science, the grants to which are for the most part paid on a general curriculum embracing a definite amount of instruction in specified branches of science and art. It is our desire to foster instruction in science and art in higher-class schools in every possible way consistent with a due regard to the general aims of these schools, and to that end special regulations have been devised, and have met with general approval.

The further instruction in special subjects of pupils who have already completed their day-school course is at present conducted under two sets of departmental regulations, viz, the provisions of the code for evening continuation schools, and the science and art directory. Certain subjects of instruction, for example, certain science subjects and various forms of drawing are common to both, and though the instruction in science and art classes is as a rule of a more advanced character, this is not necessarily and has not always been in point of fact the case, and for the more elementary stages of these subjects the rates of payment proposed do not differ greatly. Grants to the former set of classes are made from the parliamentary vote, and to the latter from the vote for science and art. It is obvious that under this arrangement there is no very clear line of demarcation between the two sets of classes and even considerable risk of duplication of grants. Guided by our experience of the working of these classes since the transfer of the administration of science and art grants in Scotland to this department, and proceeding upon principles which were set forth at length in our report of last year, we have now devised a set of regulations applicable to all classes for the further instruction of those who have left school. This code of regulations is at present before Parliament.

A further step in the consolidation of educational administration in Scotland has been taken during the past year by the transfer to this department of the charge of the Museum of Science and Art in Edinburgh. It will be our object, while maintaining to the full the efficiency of the museum for its former purposes, to use it where possible to reenforce other educational agencies, and particularly to turn it to account for the benefit of the classes dealt with in this section of our report.

In view of the fact that under the proposed code of regulations for continuation classes one-fourth at least of the expenditure upon these classes must be found locally, it becomes important to consider what aid may be expected for these classes and also for the central institutions referred to in the code from the residue grant allotted to town and county councils under the local taxation customs and excise act, 1890. The sum allotted varies in amount, but under the local taxation act of 1898 it is relieved of certain prior charges by which it was formerly liable to be decreased, and according to the return to Parliament for the year 1899-1900 it amounts to £71,192 2s. 9d., as compared with the sum of £58,793 13s. 1d., available in the year 1898-99 and £48,073 2s. 9d. in the year 187-98. Of this sum of £71,192 2s. 9d., £17,359 6s. 8d. was allocated by local authorities to the relief of rates, while £53,832 16s. 6d. was allocated for purposes of technical education.

While this sum is larger than the sum allotted to this purpose in previous years, it forms a smaller proportion of the total sum available, which would seem to indicate a retrograde attitude on the part of local authorities as regards technical education. The sum of £53,832 16s. 6d. allocated to technical education from the grant of the year was augmented from unexpected balances and other sources to the sum of £72,527 1s. 2d., of which £54,136 6s. 4d. has been expended during the year, leaving a balance (reserved for purposes of technical education) of £18,390 14s. 10d. This balance shows a progressive increase in succeeding years. It would thus appear that the sum at present reserved for technical education might, if carefully applied, of itself go far to supply the local contribution necessary under the continuation school code, which will in certain directions have a more extended application than the regulations which it supersedes, and may embrace a wider variety of classes, while that sum by no means exhausts the funds at the disposal of local authorities for purposes of technical education.

HIGHER EDUCATION IN GREAT BRITAIN AND IRELAND.

Higher education is provided in Great Britain and Ireland by universities and university colleges, and professional education by special schools of medicine attached to the principal hospitals and by schools of law and of theology.

The number of students in the universities and university colleges for the successive years of the decade 1889-1900 is shown in the following table:

TABLE XIX.—*Attendances at universities of Great Britain, 1889-1900.*^a

Universities and university colleges.	Students.					
	1889.	1892.	1893.	1894.	1895.	1896.
GREAT BRITAIN.						
England and Wales:						
Oxford (23 colleges)	3,100	3,212	3,232	3,256	3,256	3,365
Cambridge (19 colleges)	2,971	2,909	2,912	2,839	2,839	2,895
Durham (1 college)	207	212	196	196	171	171
University colleges	8,788	7,607	7,300	8,390	11,778	11,097
University colleges for women (4)	321		371	371	379	393
Bedford College for Women			146	146	190	180
Royal Holloway College for Women						
Technical: City and guilds of London (4 institutions)						
Scotland: ^b						
Aberdeen (1 college)	909	881	748	695	691	691
Edinburgh (1 college)	3,576	3,208	3,138	2,949	2,836	2,825
Glasgow (1 college)	2,165	2,140	2,041	1,878	1,842	1,866
St. Andrews (2 colleges)	208	196	205	199	204	220
Dundee University College	307	160	250	107	107	183
Glasgow (Technical) College						251
IRELAND.						
Dublin University (1 college)		1,193	1,103	1,124	1,123	1,123
Belfast Queen's College		422	394	353	353	392
Cork Queen's College		255	230	253	224	206
Galway Queen's College		110	108	108	108	105

Universities and university colleges.	Students.				
	1897.	1898.	1899.	1900.	Increase or decrease, 1889-1900.
GREAT BRITAIN.					
England and Wales:					
Oxford (23 colleges)	3,408	3,412	3,446	3,499	+ 399
Cambridge (19 colleges)	2,929	3,019	3,016	2,985	+ 14
Durham (1 college)	171	174	170	170	- 37
University colleges	13,411	10,123	11,301	10,789	+2,001
University colleges for women (4)	393	403	400	427	+ 106
Bedford College for Women	192	223	170	183	
Royal Holloway College for Women		110	110	120	
Technical: City and guilds of London (4 institutions)		1,515	1,592	1,592	
Scotland:					
Aberdeen (1 college)	755	749	765	732	- 177
Edinburgh (1 college)	2,812	2,813	2,848	2,754	- 822
Glasgow (1 college)	1,789	1,918	2,010	2,016	- 149
St. Andrews (2 colleges)	236	254	231	234	+ 56
Dundee University College	175	160	116	120	- 187
Glasgow (Technical) College	286	290	268	298	
IRELAND.					
Dublin University (1 college)	1,100	1,084	1,100	1,100	- 93
Belfast Queen's College	343	343	311	311	- 111
Cork Queen's College	206	187	188	188	- 77
Galway Queen's College	105	91	91	91	- 19

^a The statistics are taken from the Statesman's Year-Book for the dates specified.

^b For account of the Carnegie Trust for the universities of Scotland see Chapter XXIII and the Commissioner's Statement.

^c The unusually high attendance this year seems due to excess of evening students.

^d Includes 2 London colleges.

^e Decrease from 1892 to 1899.

University colleges and the new universities.—The rise of university colleges in the great centers of industry is the most important event in the recent history of higher education in Great Britain. These colleges are characterized by their liberal provision for science instruction and for technical training, and also by the admission of women on the same terms as men. Private and public resources have combined in their support, and the last and most striking phase of their development is their ascent into university organization. Owens College, Manchester (dating from 1851); Yorkshire College, Leeds (1874), and University College, Liverpool (1881), are comprised in Victoria University, incorporated in 1880. The three colleges of Wales—Aberystwyth, Bangor, and Cardiff—pertain to the University of Wales, incorporated in 1893, and Mason College, Birmingham, is the nucleus of Birmingham University, incorporated 1900. The development has been stimulated also by a parliamentary grant which has been appropriated annually since 1889 to be shared by the university colleges of England on the condition that they submit reports to the education department.

The grant which began at £15,000 was raised to £25,000 in 1897. Upon similar terms the three university colleges of Wales receive each annually £4,000 from the treasury.

The University of London has been reorganized in accordance with the statutes and regulations drawn up by the royal commission appointed under the "University of London acts," 1898. Under these statutes, which received the royal assent June 29, 1900, the university undertakes teaching-functions in addition to the examination work which was formerly its exclusive function.

The schools of the university as named in the statutes are as follows:

(1) University College and King's College (admitting women in all the faculties), (2) the 10 medical schools, (3) the 6 theological colleges, (4) the Royal College of Science and the Southeastern Agricultural College (in agriculture only), (5) the City and Guilds Institute (in engineering), (6) the London College of Economics, (7) the Royal Holloway College and Bedford College. To this list the senate may add at its discretion any public educational institution within the prescribed limits. All schools will be open to visitation, and are liable to be removed from the list.

The "Inns of Court," which at first refused to consider the proposal of the commissioners, have since come into the scheme, which insures the organization of a faculty of law.

Two new faculties are created: (1) Engineering and (2) economics and political science (including commerce and industry). Students in these subjects are not granted distinct degrees, but the diploma of their degree in science will indicate the courses of study pursued.

The royal commission on the state of university education in Ireland.—The appointment of a royal commission to report on the state of university education in Ireland is the most important event in the current history of higher education in that country. In the article appended the history and present state of the problem are set forth very clearly from the standpoint of a Roman Catholic. It is important that this standpoint should be understood, since it is the dissatisfaction of Roman Catholics with the present adjustments that has led to the appointment of the commission.

THE IRISH UNIVERSITY COMMISSION, AND UNIVERSITY EDUCATION IN IRELAND.¹

The commission has at last been appointed which the Government promised a long time ago was to report on the state of university affairs in Ireland. The inquiry has been limited, and also extended beyond what was expected would be the case; it is not to refer to Trinity College, Dublin; it is to embrace "technical"

¹ From the *Fortnightly Review*, September, 1901.

as well as academic teaching. This arrangement tends to divert attention from the paramount object of the commission's labors, the high education of Catholic Ireland, and so far is, I think, a mistake; and, without making invidious remarks, the selection of the commissioners is hardly well fitted to satisfy the just claims of the Irish Catholics. The commissioners, however, are able and conscientious men, and, if they are not sufficiently "racy of the Irish soil," if the Catholic element in their composition is too weak, if the majority, judging from their antecedents, are, not improbably, indisposed to favor the Irish-Catholic demand, still they will investigate their subject with assiduous care and skill, and will doubtless make a valuable report upon it. But I am not very hopeful that, whatever they may do, the Irish university question will be settled in accordance with what, I am convinced, is justice, within a short space of time, or even in the present Parliament. The Government is notoriously divided in this matter, and has put it off to a more convenient season; in two very striking instances at least it appointed, or pledged itself to appoint, commissions, and has not taken a single further step, though the subjects on hand were of the first importance. But whatever may be the result of this commission's work, the principles on which high education in Ireland will be adjusted at last are, I believe, hardly open to doubt; like Catholic emancipation and other reforms of the kind, what is rightly due to Catholic Ireland will, in time, be conceded. Many forces and influences, some extremely strong, may prevent this consummation in the near future, may possibly retard it even for years. The fanatics, who cling to the evil memories of a sectarian ascendancy, all but dead in Ireland; the philosophers, who would make the State indifferent in education to the Divine, and would place it on a purely secular basis; and the self-styled Liberals, who insist that even the highest education must, in their phrase, "be free," but also flout the profound objection that to throw open places of superior learning to all comers, without regard to their religious faith, all but implies that religion is to be set at naught in them, if stringent precautions, at least, are not taken—of course, deprecate or denounce the Irish-Catholic claim. Nor is it to be forgotten that large parts of Protestant England have a deep distrust in this matter of the Irish priesthood; nor yet that the recent conduct of the Irish Nationalist members has made English public opinion estranged from Ireland. Truth and justice, however, will in the long run triumph. If the Irish Protestant and the Irish Catholic are to be placed on equal levels in university life; if high Irish education is not to show the taint of the domination of sect; if the equitable rights of Catholic Ireland are not to be ignored; and if in the sphere of the conduct of man the Irish Catholic is to be given bread instead of a stone, the conditions of university affairs in Ireland will be ultimately transformed in legitimate Catholic interests.

In this cursory survey I shall chiefly consider high education in its different bearings on the position and the case of Catholic Ireland. To understand the subject it is necessary to glance back at the history of university life in Ireland. There was no Irish Oxford or Cambridge in the Middle Ages; an attempt to establish a university failed, in a land torn by feudal and tribal dissension, and in which the Roman Church of the pale and the old Celtic Church were in perennial strife. Elizabeth founded Trinity College toward the close of her reign on a site of a monastery "near" Dublin, lately suppressed. It was the purpose of the Queen, and of the two first Stuarts, that the college should, like Oxford and Cambridge, comprise other colleges, and should expand into a university in the true sense of the word. This consummation, however, became impossible during the civil wars and troubles of the seventeenth century. Trinity College absorbed into itself the germ of the university that was never formed, and when the evil reign of Protestant ascendancy had set in in Ireland it became an institution confined to the dominant caste, which lorded it over a subjugated race. Its governing body, its dignities, its honors, its degrees, were limited to the ruling class of Protestant Ireland. The Catholic pariah was shut out from its walls, and the same restriction applied to the Presbyterian Irish, held in special dislike as Swift's writings prove, by the college authorities in the first part of the eighteenth century. The college was thus an appanage of a dominant minority of sect, resting on an artificial and narrow basis, and not a university in any respect. But a great moral change passed over it by degrees, due in part to the teaching of one of its most splendid ornaments, and in part to the influences of the better era which began in Ireland after the reign of George II. Berkeley had the genius to perceive that Protestant Ireland could not prosper in any of its parts if left in isolation, apart from the people. He certainly wished that education of all kinds should be diffused through the Irish community; he probably desired that, to some extent at least, the Irish Catholic and the Irish Presbyterian should have access to Trinity College as a great place of learning.

At all events, a school of enlightened men grew up in the college after his day; and as the evil spirit of the penal laws of Ireland died out and the liberalism of the latter part of the eighteenth century made itself felt, a movement began in the Irish Parliament and found support in the college itself, the object of which was to remove or to weaken the exclusive barriers which fenced it round and to open it to all Irishmen without distinction of creed. In 1793-94, the year of the first great measure of relief for Catholic Ireland, Trinity College brought to an end the system of mere Protestant ascendancy which had prevailed within it; it admitted Catholics and Presbyterians to its degrees. Very probably, in the true spirit of Berkeley and Grattan, it would have made all its members eligible to even its highest distinctions, including a position in its governing body, had not its statutes and ordinances made this impossible. This noble reform anticipated by half a century what was afterwards done at Oxford and Cambridge.

This change placed the college on a broader basis, made it less than before the exclusive monopoly of a sect, even made it a national institution in a limited sense, and this has not been without beneficent results. The Irish Presbyterians, indeed, have not largely availed themselves of the excellent education it has always afforded, especially of late years. They have, more and more, had recourse to seats of academic learning in their province of Ulster. But a certain number of the upper and of the upper middle classes of Catholic Ireland have been for more than a century trained in the college and have had the advantage of its discipline in the battle of life. This body of men comprises eminent scholars, brilliant luminaries of the bench and bar, names illustrious in the arts of healing, statesmen and orators who have shone in the Imperial Parliament. And though Trinity College, from 1793 to the present day, has in its government, its teaching, and its essential character remained practically a Protestant place of learning with an immense majority of Protestant members, it has never been whispered that its authorities have tampered or made attempts to tamper with the faith of its alumni not of the prevailing communion. They have never dreamed of making a proselyte. In this respect they have been above reproach and suspicion. It should be added that the college fully kept up with the march of intellect in the nineteenth century. It has freed itself from the stigma of the "silent sister," at no time properly attached to it; it has ever held a high place in the letters and science of Europe; it has been called, indeed, the one institution in Ireland of which all Irishmen are proud. This great foundation, nevertheless, has never been a university in the highest sense of the word, and has never met the requirements of the Irish community as a whole. Students of all creeds are made eligible to its degrees; but its governing authorities, its fellows, its professors, and its scholars, could for many years be composed of Protestants only; its régime was that of the small Protestant upper class in Ireland. There was no place in this for members of other communions; and this restriction, though lately removed by law, continues virtually in existence to the present day. The teaching of the college, too, has been anti-Catholic to some extent; the genius loci has been always anti-Catholic. The Catholics it has educated have been extremely few in number, and, if not as distinctly as of late years the Catholic Church of Ireland has ever disapproved of the entrance of Catholics within its walls and of their participation in its studies and training. The college, moreover, has no sister colleges and no power of expansion like Oxford and Cambridge, and if its endowments are not very large, these have practically been confined to members of the one favored religion. Trinity College, in a word, reformed as it has been and admirable as it is as a place of learning, has never ceased to be a survival, in fact, of the Protestant ascendancy of a bygone age, and it retains this peculiar character to this hour.

The anomalies of the Irish University system, its inequalities, nay, its marked injustice, attracted the serious attention of Peel, when, after the repeal movement of 1833-44, he addressed himself to the task of reform in Ireland. His policy, as enlightened as the opinion of the day permitted, was to leave Trinity College completely intact as a bulwark of the Irish established church protected by the treaty of union; but to place by its side institutions of a university type, which would redress what was vicious in the existing order of things and would meet the case of Presbyterian and especially of Catholic Ireland. The principles on which the great minister founded his scheme were in harmony with the rather shallow liberalism of the time, but, I believe, were essentially false; assuredly they were ill-designed to effect his chief object, the advancement of high education among the Catholic Irish. Peel tried to embody in Irish university life the ideas which, under conditions very widely different, had been established in primary, or "national education," as it has been called in Ireland. The government of Lord Grey had set up the "national" system in the hope¹ that the warring races and

¹ This hope, it is unnecessary to say, has not been realized.

faiths of Ireland would be reconciled, to a certain extent, by instruction given their children in our new schools. The method adopted was that secular teaching should be afforded by masters and mistresses appointed by the State to pupils collected under the same roofs, but that religious instruction should be afforded to the pupils kept apart by the clergy of their respective communions.

To those who are convinced that, in the training of the young, the divine should be combined with the human, and certainly should not be postponed to it, this system was open to grave objections; and it was generally condemned by the clergy of the Irish established church and by a considerable section of the Irish Catholic priesthood. But the "national" schools were mere day schools, in which children were assembled for a few hours each day; the simple rudiments only could be taught in them; instruction, therefore, of a purely secular kind could be given to the young together in these, and religious instruction could be given apart without much offense to conscientious scruples; the "religious difficulty," in a word, was not prominent; and, if not without opposition, the "national" system has been accepted in Ireland, and, as a scheme of primary education, has become largely successful. The "national" system, I have said, was as far as possible made the model of the new university system to be formed in Ireland. The Queen's colleges of Belfast, of Galway, of Cork were founded, the first for the higher education of the Irish Presbyterians, the two last for the higher education of the Irish Catholics; they were liberally endowed and furnished with a staff of professors, masters, and heads; and they were affiliated to the Queen's University, as it was named, which, like Trinity College, was empowered to grant honors and degrees. The principles of education in these places of learning were assimilated to those in the "national" schools; that is, secular knowledge was to be imparted, in these seminaries, to the students together, as part of the collegiate and university course; and this, indeed, was all that was to be taught. But religious instruction, as such, was not to be given; they had to pick up this, as they best could, apart; it was abandoned to the clergy outside the college walls; in a word, was left to shift for itself.

This system was founded on a basis essentially unsound. The objections to it were numerous, and, I think, decisive. Secular instruction, if confined to the mere rudiments, can be rightly made, as the phrase is, "combined;" that is, it can be afforded to children in schools together; but in the case of high education this is well-nigh impossible, for here it is scarcely practicable to lay down what is really secular. Religious questions of all kinds, for example, enter into moral philosophy, metaphysics, modern history, even physical science; it is all but hopeless to try to teach young men these subjects under a common system; the necessary result is that, under this condition, these great studies must be disregarded or largely neglected. Religious instruction, again, can be dispensed with in simple day schools, and, in accordance with the "national" system, may be left to the parents of the pupils and to their clergy; but how, consistently with Christian duty, could it be dispensed with in collegiate and university life, and in the case of youths, at a most critical age, be virtually excluded from collegiate and university teaching? The new university institutions set up by Peel in Ireland were thus, in the strictest sense of the word, "nonreligious;" and it requires little knowledge of the nature of man to be convinced that they were "irreligious," for this very reason, with whatever fine names they might be tricked out, as "free," "liberal," "undenominational," etc., their spirit and tendencies were anti-Christian. They were calculated, in the case of superior minds, to form men of the type of Gibbon and Hume, and in the case of inferior to promote religious indifference and many kinds of scepticism. The Queen's colleges and the university were at once denounced as "godless" by the high church party in the House of Commons, and though its opposition was easily overcome, the objections it made have never been answered and have since that time been sanctioned by most real thinkers. The reception of the measure was, for a while, uncertain in Ireland. The "Young Ireland" party, rather jealous of the Catholic priesthood, and earnest in the cause of education of the highest order, desired that the experiment should be tried; but O'Connell denounced the whole scheme from the outset, and after a few days' hesitation the Irish Catholic bishops concurred. In 1850 this decision was solemnly confirmed by the judgment of the Catholic Church of Ireland; the Queen's colleges and university were proscribed as seats of education, "dangerous to faith and morals;" true Catholics were enjoined to avoid them, and the anathema of the synod was ratified at Rome. As the result the two Queen's colleges of Cork and Galway, designed for Irish Catholic youths, proved almost failures, and though the Queen's College of Belfast struck root and flourished, and has become filled with Presbyterian students, this system of education, as a whole, has not been successful. In 1854 the Irish Catholic bishops, seeking to promote education on the principles they deemed true, founded the "Catholic University

of Ireland," as it has been called; its first head was the illustrious Newman. The work of this institution has been most praiseworthy, though it has depended on the contributions only of a very poor communion. But the Catholic University was no more than a high school. Unlike Trinity College and the Queen's University, it could not grant degrees and it was left without any support from the State.

This position of affairs in Irish high education continued unchanged during a series of years. More than one statesman, indeed—notably the late Lord Mayo—was alive to all that was faulty in it. That Trinity College with its endowments should remain practically an academic close borough for a fraction of the Irish community, and that the Catholic University, designed to be a seminary for the large upper middle classes of Catholic Ireland, should not have a university status and should not receive a shilling of public money was obviously in a high degree unjust, and in spite of "liberal" pæans, noisy and bold, the Queen's colleges and university were not fulfilling their mission. Feeble efforts at reform proved abortive. It was not until 1873 that Mr. Gladstone took up the Irish university question and made an attempt to effect a settlement of it.

The minister addressed himself earnestly to his task; high education in Ireland, he had recently exclaimed, was the third branch of the famous upas tree, the baleful shadow of which was blighting the land; but the measure he proposed was the worst of his Irish reforms of this period; it ended in complete and ignominious failure. With characteristic historical leanings Mr. Gladstone recurred to the policy of Elizabeth and her two first successors, and sought to create a university for the whole Irish community, a foundation which Trinity College had, as it were, swallowed up, and which after the passing of the infamous penal code could not include the Irish Catholics within its precincts. This university was to be the only authority to confer degrees in Ireland; it was to be supreme in Irish university life; its governing body was to be composed in part of the nominees of the Government and in part of the heads of the institutions to be connected with it; the Queen's University was to disappear; Trinity College, and two of the Queen's colleges—that of Galway was to be suppressed as hopeless—the Catholic University, and a few other colleges were to be affiliated to it as subordinate members. The position, however, of these different groups of colleges, under this scheme, was to be wholly unequal. Trinity College was to retain its endowments, with the exception of £12,000 a year, to be transferred to the new National University, as it was called; and it was to be thrown open, from top to bottom, to the fullest extent, on "liberal" and "undenominational" principles. The two Queen's colleges, too, were to preserve their "free" character as before, but to be subsidized by the State; but the Catholic University was not to receive a farthing, and this, too, was to be the case of any other colleges, if these were "denominational," and of a sectarian complexion. The project, therefore, was, on the face of it, unjust, and scandalously unjust to Catholic Ireland; and yet this was, perhaps, not the worst of its features. Mr. Gladstone applied to education of the higher kind in Ireland the principles which Peel had unfortunately applied to the Queen's colleges and University many years before, principles not only essentially vicious, but denounced as "Godless" by High Churchmen, and at the Synod of Thurles, and proved to be mischievous in Ireland after long experience. The education in the National University was to be strictly secular; it was to be afforded to the students together; religious education was not to be countenanced by the State; it might be afforded to the students apart as they pleased, but it was not to enter university life; and that secular education should be wholly secular, moral philosophy, metaphysics, and modern history were to be left out of the university course.

The eloquence of Mr. Gladstone, and his power over the House of Commons, sustained this ill-conceived measure for a few short days. Ere long, however, protests came in from all kind of quarters, and it was universally condemned in Irish opinion. Admirable debates were held in Trinity College; its leading men recognized the just claims of Catholic Ireland, and acknowledged that they were not satisfied by the bill; but they were indignant that their time-honoured foundation should be stripped of part of revenues by no means excessive; they especially resented that Trinity College should be, in a great degree, placed under the control of the castle, a provision fatal to its independence and its free life, and that the noblest studies of the intellect of man should be banished from the alma mater of Berkeley and Edmund Burke. In all this educated Irishmen fully concurred, and, as a matter of course, the Irish Catholic bishops, backed by the laity without a dissentient voice, were loud in their condemnation of the minister's project. They reiterated with emphasis the objection of their predecessors, that the new university would be simply "Godless," a "place in which Mammon was set above God;" they declared that they would do all that in them lay to keep Catholic Ire-

land away from it, as in the case of the Queen's colleges; they dwelt strongly and rightly on the gross unfairness of leaving the Catholic University and colleges of the same type unendowed, and practically imposing on them a heavy, and even a shameful penalty. This general manifestation of adverse opinion had a powerful effect on the House of Commons; a formidable opposition was arrayed against the bill. Disraeli described the measure as "simply atheistic," and the epithet expressed his real view, for in high education he was of the faith of Edmund Burke; he singled out for censure the exclusion from university teaching of the best and most fruitful parts of learning, though on the "unreligious" principle which was of the essence of the scheme, this limitation was, no doubt, logical. One of the best speakers against the bill was Ball, one of the ablest representatives of Trinity College, an orator, who, in after years, held the great seal of Ireland; his comments were moderate, just, and wise. The Conservative party followed, of course, its leader; not a few Liberals fell off from Mr. Gladstone; the members from Ireland, almost with one voice, voted against the measure. The bill was rejected by a small majority; one of the most powerful administrations of the century was virtually wrecked.

In the year that witnessed the defeat of this sorry measure, Parliament, under the auspices of the late Mr. Fawcett, effected a change in the constitution of Trinity College, which was "to settle the Irish University question." The "free," the "liberal," the "undenominational" principle was applied to this seat of learning with a stringency that never applied to an old university before. Every office and privilege in the college was made open to its members without regard to religious faith; "not only a Roman Catholic, or any Dissenter, even a Unitarian, but a Jew, a Turk, or an avowed Atheist might become a fellow or a teacher of the college; it is possible that any one of these, even the latter, might be provost."¹ It is a mistake to suppose that anything like this was done at Oxford and Cambridge by the legislation which relaxed their tests; the essentially religious character of these great foundations has been fully preserved. Trinity College was thus in theory made "nonreligious," that is, I think, "irreligious;" it was assimilated, in conception, to a Queen's College; but it was idle to suppose, as was vainly imagined, that Irish Catholics would resort to it more largely than before, or that the Irish Catholic Church would be satisfied. On the contrary, now the college has been placed on this new footing, the Irish Catholic bishops have more than ever condemned it, and quite rightly, on the principles they maintain; the Catholics educated in it are now a mere handful of students. Happily, however, for Ireland and Irish Protestants, Trinity College has not been divested of its religious character; in fact it remains, to all intents, a Protestant place of learning; its governing body and dignitaries are nearly all Protestants; it is a Protestant institution in every sense of the word. It is, therefore, still regarded by the Irish Catholics and by the heads of the Catholic Church of Ireland as a relic of the Protestant ascendancy and consequently to be avoided as a place of high education; and the only result of Mr. Fawcett's "reform" has been to strengthen the barriers which exclude the great majority of Irishmen from university life. After Disraeli had become minister, in 1874, that great statesman made an attempt to redress the injustice, of which he was fully conscious, in the condition of high education in Ireland; no doubt can exist that he wished to provide the Catholic University of Ireland with funds from the State, and, perhaps, to raise it to the level of Trinity College. But English opinion would not permit this; Disraeli, now Lord Beaconsfield, made a compromise in 1879-80. The Queen's University was abolished; and other seats of education having been left as they were, a Royal University was established, empowered to confer degrees on the students of all foundations, who should pass the examinations required for the purpose. The Catholic University and other institutions of this type were thus enabled indirectly to obtain degrees for those who were educated within their precincts; and this has certainly been a beneficent reform. But the Royal University is merely an examining board, not a university in the true sense of the word; and the Catholic University remains unendowed, while Trinity College and the Queen's Colleges possess sufficient endowments and wealth. The Catholic University, it should be added, has been divided into separate colleges; but it fully retains its original character; it is a Catholic foundation ruled by the heads of the Irish Catholic Church.

This, therefore, is the state of high Irish education in the first year of the twentieth century. Trinity College provides an admirable training for the Irish Protestant; but it is a Protestant institution in its essential nature; and, just and liberal as its authorities are, it contains very few Catholic students, and it is discountenanced by their religious directors. The Queen's College of Belfast satisfies

¹ See Irish Education, by Butt, p. 35. A masterly tract.

Presbyterian Ireland; but the Queen's Colleges of Galway and Cork have failed to bring Catholics within their spheres in anything like their due proportion; and they are proscribed as "Godless" by the Irish Catholic bishops, as they were proscribed by High Churchmen in the House of Commons. The Irish Catholic, therefore, as a matter of fact, is all but practically excluded from these institutions; and though, if he happens to be a member of the Catholic University, and of foundations of the kind, he may obtain a degree given by an examining board, he has really hardly any place in Irish University life: he is virtually nearly shut out from it. And Trinity College and the Queen's colleges are supplied with the funds they require by the State, and the Catholic University, a place of learning, to which the upper middle class of the Irish Catholics would naturally resort, which is a seminary upheld by the leaders of their Church, and which, many as its disadvantages are, has done excellent work, is left out in the cold, and as such does not receive a shilling. I do not envy those who refuse to see that this whole scheme of education is radically unjust, and gives Catholic Ireland a real and great grievance; indeed, the arguments of its supporters ought to reduce them to silence. It is said that high education in Ireland has long been placed on a true basis, because it is "free," "liberal," and "undenominational;" because Trinity College and the Queen's Colleges admit all persons within their spheres, whatever may or may not be their religious faith, and because in any case the Royal University can grant degrees to those who choose to avail themselves of it. But what is the value of these pleas in the face of long experience and the simple facts of the case? Abstractedly, Trinity College is "open;" but really it is closed to nine-tenths of the Catholics, who ought to have a share in a university career in Ireland; they believe it to be an institution perilous to their faith, and a monument of the sectarian domination of the past.

It is exactly the same with the Queen's colleges, save that the objection is more decisive. They are practically barred to the Irish Catholic, for, "free," "liberal," and "undenominational" as they may be, the heads of his church have pronounced them "godless," and he keeps studiously aloof from them. And can it be said that these scruples of conscience and even these prohibitions are mere blind bigotry? Reverse the instance of Trinity College. Were the State to set up a great Catholic seat of learning in Dublin and to surround it with the traditions of Catholic power, how many Irish Protestants would have recourse to it, even though it were fully thrown open to them? Or, were the colleges of the great foundations of Oxford and Cambridge assimilated to the Queen's colleges, would not the cry go forth that what was "nonreligious" was "godless," and how many English parents would send their sons to them? For myself I agree with Newman and Edmund Burke on this grave question. I believe that the Catholic aversion to Trinity College and the Queen's colleges is perfectly right; at all events, it has been unequivocally shown during a long series of years. And this being so, on what pretense of justice can Irish Catholics be virtually kept out of the only seats of education endowed by the State in Ireland and relegated to an examining board and to a Catholic seminary which the State has starved? Is not this a palpable and gross wrong; nay, may it not be described as a sinister attempt to compel or to bribe the Irish Catholic into accepting a system of education of which he disapproves at heart?

One argument, indeed, if it can be called an argument, against doing right to Catholic Ireland in university education and all that it involves can not be passed over, even within my scanty limits. "Popery," it is said, is an intolerable thing; Protestant England must have nothing to do with it. To establish and endow in Ireland a place of learning for "papists" is therefore touching the unclean and bowing down to Baal. Irish "papists" must put up with Trinity College and Queen's colleges as they are. This pernicious stuff is not without effect on the masses in England; it especially gratifies the "nonconformist conscience," given to straining at gnats and swallowing camels. Its influence was seen in a singular Radical vote, which, when home rule was before the House of Commons in 1893, enabled the Irish parliament to set up a Catholic university of the most exclusive type, which Radicalism would have tabooed in the Imperial Parliament. The strength of this prejudice can not be ignored; it is still a real danger to the Irish Catholic claim. But if an argument such as this were to prevail, many Catholic institutions ought to be shut up, and it is only worthy of Mr. Kensit and those who follow in his train; no statesman, openly at least, would adopt it. The newly appointed commission will no doubt consider the question they have to deal with in its various aspects, and especially with reference to the demand of Catholic Ireland. Two general schemes of reforming high Irish education on equitable and enlightened principles have been advocated within many years; I shall briefly direct attention to them. The first scheme would to some extent be modeled on the lines of Mr. Gladstone's defunct measure; but it would be free from its palpable

errors, and certainly would be a great improvement on it. A national university would be set up in Ireland; it would be the supreme seminary of high Irish learning; it should have the power to confer degrees and honors; but probably the Royal University would be left unchanged, and should have a right to grant degrees as an examining board. The governing body of the new institution should be composed of the heads of the colleges to be connected with it, with no admixture of nominees of the Government; it should be independent, but should receive adequate support from the State. Trinity College would lose its privilege of conferring degrees, but in other respects it would remain intact; it would retain the revenue it possesses; it would be free to maintain its present system of teaching and training. But Trinity College, the Catholic University, and the Queen's colleges—those of Galway and Cork—being perhaps suppressed, but Belfast College being left as it is, with the possible addition of a few other colleges, would be affiliated to the university that would represent Ireland. This should have its professorial and teaching staff, and it should of course hold examinations of the students of the subordinate colleges, in order to grant degrees and other honors. The Catholic University should be reasonably well endowed, as Trinity College and the Queen's colleges are; but it should cease to be wholly under Catholic Episcopal control. Its governing body should contain a lay element, and its professors and teachers should not be exclusively Catholics, though it would remain essentially a Catholic seat of learning. In consideration of the assistance to be afforded by the State, the heads of the Catholic Church in Ireland, it is well known, would agree to these terms.

The advantages of this scheme can not be gainsaid; theoretically, it is entitled to very high praise. That it would tend to reconcile the hostile races and faiths of Ireland by bringing their youth together in the province of learning is a vain imagination, in my judgment; the hopes of the authors of the "national" system in this respect have in no sense been realized. But certainly it would remove the anomalies and the one-sided and manifold wrong which high education in Ireland as it exists presents; it would produce equality within this important sphere: it would place the Irish Protestant and the Irish Catholic on the same level; it would make high Irish education really free. Were it carried into effect probably we should hear no more about "Protestant ascendancy" and "godlessness" in the university system of Ireland; a great Catholic grievance would be removed; parents who wished for a Protestant, a Catholic, or a "nonreligious" education for their sons would have a complete unbiased choice.

A national university, too, in Ireland would have this special merit; it would promote general competition in university life; the youth of the affiliated colleges would vie with each other in the race for university degrees and honors; the ablest students would secure the best prizes; "a career would be thrown open to every kind of talent." The value of all this must be acknowledged; this scheme, nevertheless, I greatly fear, would practically not succeed in Ireland under the actual conditions of the national life. The heads of the affiliated colleges would, under this system, be the governing body of the university to be brought into being: is it probable, things being what they are in Ireland, that they would agree even in the administration and the management of the new foundation? Place Dr. Salmon, the provost of Trinity College, Archbishop Walsh, to whom the Catholic University owes so much, and Dr. Hamilton, the president of the Queen's College of Belfast, in supreme command on the university board, and could they be expected to conduct its general affairs in harmony? And if things, as is but too likely, should be brought to a deadlock, would not the "castle" have a plausible excuse to intervene, to place its nominees on the governing body, and thus to deprive the university of its independence, its most precious possession? And even if this apprehension were to prove vain, would there not remain an obstacle of even much greater force? How could the chiefs of the university fix a standard of common studies, in subjects in which religious questions would arise for the examinations to be held for degrees and honors? Would not "the religious difficulty" cause discord that nothing could reconcile? And would not the inevitable result be that moral philosophy, metaphysics, modern history—nay, physical science—would, as the three first were under Mr. Gladstone's project, be excluded from the university course; and that this plan of learning would be a mere *caput mortuum* as regards the noblest pursuits of the intellect of man?

The second scheme is much less ambitious; but it is less open to objections I fear very grave; it is more conservative and in unison with existing facts. Trinity College should be left completely untouched; it should preserve its right to confer degrees; its funds and its mode of education should remain as they are. Two of the Queen's colleges would disappear as useless, but the Queen's College of Belfast should be made a place of Presbyterian learning, with a power to grant degrees

and with increased endowments; it should become a university in the proper sense of the word; the Royal University should continue to be an examining board, empowered to grant degrees and honors to all who should merit both, and notably to the many students in Ireland who can not afford residence. The Catholic University and its dependent colleges should receive full and frank recognition from the State; it should be supplied with suitable buildings and sufficient funds; it should have the same privilege as its rivals to confer degrees and honors. But, as in the case of the first scheme, it should not be wholly under Episcopal control; its governing body should, in part, be composed of laymen; its professors and teachers, if in the main Catholics, should not necessarily be all of that faith. This scheme would be free from the immense difficulties which the establishment of a national university in Ireland presents; it would remove the injustice which, in high Irish education, stares us in the face; it would, as far as possible, leave things as they are, and it would be more consonant to Irish opinion, and more in accord with Irish ideas than any national university that could be set up. It would also make high education wholly untrammelled; and if it is urged that it forms a "denominational" system in Irish university life, it is sufficient to say that this is what all communions in Ireland desire at heart to possess. It is generally understood that a project of this kind is favored by the authorities of Trinity College; it would doubtless be well received by Presbyterian Ireland; it would be acceptable to Catholic Ireland and her heads. Apart from the miserable pretense that "it is a vice to pay and bribe Popery," which I only notice to pass it by, the only plausible argument against this plan is that the power given to different places of learning to confer degrees and honors might lower the standard of their value; the degrees of the Catholic University, it is hinted, would be almost worthless. But this is the affair of the students who seek degrees; the value of these are quickly gauged, so to speak, in the market; inferior degrees would soon be found to be inferior; and as to the sneer at the presumed bad qualities of Catholic university degrees, the great success of the students of this foundation at the examinations of the Royal University during a series of years, many as are the disadvantages in their way, is a sufficient guaranty that this offensive hypothesis is false. The argument, in a word, is mere dull bigotry; besides, the degrees of the Royal University are open to all men, if those of the Catholic University were not up to a proper standard, as most certainly would not be the case. For the rest the Irish university question is pressing; the unfairness of the present arrangements can not long continue; if justice is not done to Catholic Ireland in this matter, Trinity College and the Queen's colleges will, in the long run, probably go the way of the late Irish Established Church. The commission, I trust, will at least lay down the lines of an equitable, comprehensive, and wise reform.

WILLIAM O'CONNER MORRIS.

APPENDED PAPERS.

THE GOVERNMENT EDUCATIONAL BILL.¹

[From the Contemporary Review, June, 1901.]

It is not easy to overstate the importance and far-reaching effect of this bill. If it passes into law it revolutionizes our whole educational system, not only by what it enacts, but still more by what it directly contemplates, by the avowal of the Government which introduces it and by the creation of machinery which, once in existence, is proposed to be made applicable to all grades of education.

It will probably be well to state what the bill does, and to examine how it may be worked, and probably will be worked.

The title of the bill is significant. It is a bill to make provision for and confer certain powers on local educational authorities in England and Wales.

The authorities are not authorities for education "other than elementary," as in the bill introduced by the Duke of Devonshire last year. They are general education authorities over the whole country. The first clause says: "The council of every county and county borough, acting through an Education Committee, constituted in accordance with a scheme made by the council and approved by the

¹ Introduced May 7, 1901. Withdrawn June 27.

board of education, shall be the education authority for the county or county borough."

Sir John Gorst, in introducing the bill, at the outset declared that it was intended that this authority should deal with all education. In the House of Commons on Tuesday, May 7, he stated: "The bill is to establish in every part of England and Wales a local educational authority which is intended to supervise education of every kind, whether elementary, secondary, or technical," and Mr. A. Balfour is reported in the *Times* of May 18 as writing to Mr. Gray, M. P.: "The Government quite recognize that until both primary and secondary education in each district are confided to a single educational authority we can not regard our educational system as properly organized." He goes on to say that the present bill, though incomplete, "is evidently a necessary preliminary to any such advance."

Thus we may take it that the authority now proposed to be set up is to be the one authority in its district for all grades of education, and it is from this point of view, and not for the mere instalment enacted by the bill, that it must be examined. Moreover we must look at several clauses of the bill in their operation when elementary education is placed under this new authority.

Now, what is the authority which it is proposed to create. It is not the county council or the county borough council, which, though not elected for education, is nevertheless a body based on local popular election. It is to be the county or county borough council, acting through an education committee. There was a great deal of discussion in 1896, when the Government introduced their bill setting up the county council, as to what was to be the relation of the council to its committee.

In that bill it was enacted that the education authority was to be the county council, acting through a statutory education committee; and a great deal of interesting discussion was necessary to elicit the intention of the Government.

Those who are in favor of representative institutions will desire that the elected representative local authority should not only be theoretically, but practically, the effective local authority for administrative purposes.

Much turns on whether by the words "acting through an education committee" it is intended that the proceedings of that committee shall or shall not be liable to confirmation or rejection by the county council.

Sir John Gorst, on April 16, 1896, in answer to a question on this point gave a Delphic utterance which hardly helped the inquirer. He said: "The reports (of the education committee) will be governed by section 82, subsection 2, of the local government act, 1888," and again he said they would be under the general law.

Mr. Chamberlain, the great champion of universal municipal authority, in a letter to Mr. Ansell, a constituent wrote: "The committee will be subject to the general instruction of the council, and they will no doubt report to it, like other committees, so that their proceedings will be public, and subjected to popular criticism and control." Nevertheless, Sir John Gorst, on another occasion, said that the education committee would be like the watch committee, which, on many points does not obtain the confirmation of its acts by the council, but acts *proprio vigore*. It was most important that this point should be cleared up. But the readers of the debates of 1896 will find that as explanations multiply the clouds thicken. Mr. Balfour will be found (*Hansard* xli, page 1284) saying that he agrees with Mr. Chamberlain and with Sir John Gorst, and that the committee will be like the watch committee.

Sir William Harcourt, however, and Mr. Evans both made it clear that the statements and references of the Government were incorrect. Mr. Evans pointed out that the law creating a watch committee did not make the council, acting through the watch committee, the authority for dealing with the police, but made the watch committee itself that authority. It was further pointed out that there is a marked distinction between allowing a watch committee, composed exclusively of members of a town council and sometimes composed of the whole town council, to act without confirmation; and allowing a body which is only partially representative, and in which the representative element may be only a bare majority, to act in the same way. Sir William Harcourt finally completed the exposure by quoting the operation of section 88 of the local government act of 1888, which provides that every committee shall report its proceedings to the council by whom it was appointed, but to the extent to which the council so direct, the acts and proceedings of the committee shall not be required * * * to be submitted to the council for their approval.

If in the bill now before the House of Commons the words were "in accordance with the provisions of section 82, subsection 2, of the local government act of 1888," then the county council might, in such instances as it pleased, delegate the power of acting without confirmation to its education committee, but except so

far as the council granted such delegation the committee would require confirmation of its acts. But it is clear that the intention and purpose of the Government in 1896, and also, presumably, at the present time, is to create education committees which, when once the money has been voted to them by the council, will act in substantial independence of the council. Further, the bill of 1901 limits the powers of the council much more than the bill of 1896. In 1896 the council were free to compose their committee with or without outsiders. They might retain the complete representative character of that committee with no element of nominees, and they had a free hand in the event of their admitting outsiders to settle how many there should be and how they should be admitted. They could also modify the composition of their committee from time to time.

The present bill puts practically the whole power in the hands of the board of education. The council may submit a scheme, and the board of education may approve it or reject it, or suggest modifications. But if the board of education withhold their consent for twelve months they then acquire the absolute right to frame the scheme by themselves. All they are bound to do is to provide that a majority of the members shall be members of the council. The bill does not even say that they must be members elected by the council. Thus, with a conservative board of education and a conservative county council, all may go smoothly; but suppose a radical council in a town like Leicester or Halifax. If the board of education objects to the scheme submitted, they may, at the end of a year, frame a scheme in which they may nominate the members of the town council, and add any person they please to represent, as Sir John Gorst twice said was intended, the various "interests" of the district—"interests" being probably hostile to any expansion of education which might clash with those interests.

And it is intimated that this unrepresentative body is hereafter to be entrusted with the control of primary as well as of secondary education. The promoters of the project by these means could represent the forces hostile to popular education twice over. In a school board, on a town council, the whole community is represented, the friends of a liberal measure of education and the foes, the friends of undenominational education under public control, and the friends of denominational schools under private management. In many towns the latter have the majority on the school board. It is, however, suggested that such school boards as those of Liverpool and Manchester, elected by all the citizens, are not adequate to deal fairly with church interests, and we shall probably have the claim put forward that on the new committee the Diocesan Association, the Wesleyans, the Roman Catholics, shall, *ex officio*, be represented, to say nothing of associations of teachers in secondary schools, and so forth. The moment people are put on a public board as advocates of "interests" it will be found that they are apt on that board to act as advocates, not as impartial colleagues. This has already been noted on certain technical boards, where special associations have been invited to nominate representatives, and these representatives have been heard in debate frankly to admit that they sat there to watch over the interests of those who sent them. But what will be the effect on the education committee as a whole?

In our local civic life parties are often fairly balanced on the county or borough council, and the committees are also constituted to reproduce the proportions of the main body. Thus, if we had an education committee of 31 in a large borough such as Birmingham or Manchester, of whom 16, or even 18, were taken from the council, these 16 or 18 would be not very unequally divided, but if to these we add a dozen representatives of "interests," the greatest interest of all—that of a liberal supply of good education to the unorganized mass of the industrial population—will be in danger of going to the wall. Let anyone read the organs of the secondary teachers, papers such as the *Journal of Education* and the *Educational Times*, and they will see a bitter jealousy of what they consider the encroachment of popular education. See also the utterances of the deputations from the bodies of secondary teachers who wait on the Duke of Devonshire. They go so far that even the Duke is obliged mildly to remind them that the higher grade schools of the school boards are doing useful work, and that what is needed is not their abolition or destruction but their coordination.

If elementary education is to be put under these new committees, the whole life and activity which have characterized the growth of elementary education in our large towns will disappear. Not only will the instruction be reduced as low as possible, and few or no higher elementary schools will be promoted, but on questions of school provision districts will be left unprovided for and the interests of denominational schools will be energetically protected. That one of the effects of superseding school boards by town councils is to secure rate aid to denominational schools is admitted by Sir John Gorst himself in an article written by him in the *Nineteenth Century Magazine* of November, 1896. He there says (p. 705) that if

the school board were a committee of the town council it would have had regard to the general interest of the town. "It would have clearly been the interest of the town at large to keep the already existing schools on foot—to make them perfectly efficient, and to build new schools only so far as it might become necessary to supplement existing accommodation. The interests of the managers of voluntary schools would have been identical with those of the town, and when interests are identical parties easily come to terms." There is no doubt that it is part of the scheme of the bill before us that shortly the education authority shall take over elementary education in day schools, and that then the denominational schools shall be aided out of the rates. This it is which makes the proposed constitution of the new education authority a matter of such serious moment. Once constituted, the education committee can not be changed without the consent of the board of education.

Passing now from the constitution of the education authority to its powers, we come to clause 2 of the bill.

Here the ridiculous inefficiency of the bill for good, side by side with its wide-reaching effect for mischief, stands out. Both in the bill of 1896 and in last year's bill, it was enacted that the whole of the beer and spirit money (residue under section 1 of customs and excise act, 1890) should be applied to education.

This year the money is merely applicable—that is, county and county borough councils are free if they please to apply a whole or part in relief of the rates. Surely the least that should be done, if we are in earnest in creating new authorities to develop higher education, is to require that the whole of this fund shall necessarily be applied to this purpose.

In clause 3, subsection 2, we come to a very important provision, to which little attention has hitherto been directed. It is here enacted that the council may levy a rate for "special county purposes," and the council may determine what parishes are to be liable to contributions for any special county purposes.

There is nothing said as to the right of the ratepayers in the specially-rated area to have a voice in the spending of this money. But at once we see the power of levying a rate in aid of a denominational privately-managed school. The county authority has power to establish or to aid elementary evening continuation schools. By levying a rate in a rural parish with no school board, they may materially aid the day school by paying an extra salary to the head teacher for evening work, by paying a rent for the building, and in other ways; and, of course, when the other elementary restrictions are removed, as we are warned they will be, this packed county education committee may subsidize by means of local twopenny rates any voluntary schools in the county without any provision that the ratepayers so assessed shall manage the schools to which they contribute, or secure equal opportunities, regardless of churchmanship, for the appointment of teachers or even of pupil teachers in the school. Fancy in a Nonconformist county like Cornwall, if by means of a judicious admixture of "interests" in the education committee, the village church schools were to be aided in this way. In a Conservative county like Dorsetshire, Berkshire, Sussex, and many others that might be mentioned, the future of the villages would indeed be gloomy, with irresponsible management and exclusive religious ascendancy permanently imposed upon them. The remedy, perhaps, will be little better than the mischief—the introduction of the ecclesiastical question into county council elections, and the transference from school boards to the new educational authorities of the so-called "religious question." It will be noticed that clause 5 contains the restrictions upon an education authority as to the aid they may give to schools. There is no prohibition against a county council establishing or maintaining a school in which there shall be exclusive religious teaching of one type—for instance, Church of England—and in which the head teacher and all the staff may be required to be in orders or members of a particular church. If the school is a boarding school, there need not even be a conscience clause. Thus an education authority might take over one of the notorious Woodard schools, with all its existing rules, and maintain the present committee of managers as a local committee, maintaining also all the practices which have raised so much apprehension among ordinary Protestants.

They might by the terms of the act take over and support a Roman Catholic convent school, taught and managed by nuns. All the safeguards which were contained in the technical-instruction acts are swept away.

The least we should demand is that in any school established or maintained by the new authority there shall be no preference or disability for any member of the teaching staff, or for any scholar, by reason of his belonging or not belonging to any church, and that care shall be taken in constituting any committee of management that no persons be excluded by reason of their church membership, but that both in teaching and in management the whole constitution shall be free from all denominational bias.

Equally stringent conditions would not be applied to all schools aided, but at any rate provision should be made that where the public aid exceeds the private income from subscriptions and endowment somewhat similar conditions should be imposed, and where they are not accepted the aid should be limited so as to secure that sectarian institutions shall be in substance maintained by the contributions of those who manage them and enforce their sectarian character.

Clause 6 is a very complicated one, and is intended to overcome the difficulty which was perhaps the principal cause of the shipwreck of the bill of 1896, namely, the jealousy between the county and noncounty boroughs. It is here proposed that where any urban district will raise any rate not exceeding one penny in the pound sterling for the purposes of the act, they may, by agreement with the county authority, or, failing agreement, by the decision of the board of education, do so, and in that case the urban authority in question shall manage the schools or colleges within their immediate area to such an extent as may be agreed between them and the county authority, or, failing agreement, may be decided by the board of education.

Everything is here finally left to the board of education, who are masters of the situation. This is another of the numerous provisions of the bill which substitute bureaucratic absolutism for definite constitutional rights. It is, of course, hoped that this offer will appease the lesser boroughs. But they will still be at the mercy of the county authority, for supposing the smaller urban authority to levy its rate and get the support of the board of education, it will be in the power of the county authority then to levy under clause 3, subsection 2, the twopenny rate as a special purpose on the urban district in question, and thereby force them to maintain what would be a county school out of a special local rate; or, again, the county might leave them the county school to manage without any funds by which to support it, in which case we may readily imagine that the urban authority would not make the request for management contemplated in the section.

Before we come to the important schedule of acts repealed, we may deal briefly with clauses 8 and 9, which profess to get over the difficulty caused by what is known as the Cockerton judgment.

Briefly the facts are these:

For many years, ever since the passing of the act of 1870, and before that act, grants were paid to elementary schools by the science and art department. Public elementary schools were recognized as recipients of these grants by the directory, which is the official set of regulations of the science and art department, and by the code, which similarly regulates that part of the education department which is administered from Whitehall.

Briefly to illustrate how far this went it may be mentioned that in 1868-69-70 the science and art department founded scholarships to be competed for in elementary schools, and to be held by scholars in elementary schools up to the age of 16, subject to passing yearly in one or more subjects of science and art set forth in the scheme.

Similarly the code in 1871 provided that grants should not be paid to scholars in public elementary schools from Whitehall for any subjects for which the same scholars were receiving grants from the science and art department. At that date scholars working in Standard IV could be presented and earn grants from the science and art department; but the limit was gradually raised till at length no scholar who was not working as high as Standard VII was eligible for the general grants of the science and art department.

But during the last few years the board of education has changed its policy, which for many years encouraged and stimulated the teaching of science to scholars in elementary schools, and through successive limitations so changed its regulations as at length to lay it down that no scholar on the roll of a public elementary school could receive grants from the science and art department. At the same time the regulations of this department, which for more than forty years had proclaimed that it existed for the benefit of the industrial classes, were changed so as to transfer to the middle class those grants which Parliament had so long voted for the industrial class.

Under these circumstances the school board for London was surcharged by the auditor for certain payments made in connection with the science and art department on the ground that school boards had no power to spend the rate or the school fund upon teaching under the science and art department, either in day or in evening schools.

When the matter came before the court judgment was given in favor of the contention of the auditor, and it must therefore be taken as legally decided that the practice which has prevailed ever since the passing of the education act is illegal, and that school boards have no power to mark their scholars on the registers of the science and art department, or to obtain grants from that department. But,

in addition, other points were touched upon and other intimations of opinion given by the judges which, though not essential to the judgment, yet raise serious doubts of legality in the minds of all members of school boards.

One is, how far the code is not only a standard of obligation but also a limit of the right to teach.

The school boards had generally considered that the code laid down the conditions of Parliamentary grants but did not fetter the right of school boards any more than that of other managers to teach other subjects, provided they conformed to the definition of an elementary school laid down in the act that "the principal part of the instruction should be elementary."

In support of this opinion they bore in mind that the code, down to 1882, paid grants for scholars in day schools up to 18, implying many years of teaching beyond the highest standard; that the free education act gave parents a right to free education up to 15, which implied one or two years' instruction beyond the range of the standards, and that the code itself, even at the present day, recognizes payment for scholars beyond the seventh standard up to the age of 14.

The new higher elementary education clauses in the code also recognize payment for scholars up to 15 and attendance up to the close of the year in which they reach 15. All this, however, is now shrouded in an atmosphere of doubt and obscurity owing to various incidental dicta of the judges. There is, moreover, another vital question raised in reference to evening continuation schools.

At the passing of the education act, 1870, the Government and Parliament recognized attendance in these schools and payment for scholars up to the age of 21. Subsequently the code from time to time varied the upper age for payment, but in 1892 abolished all upward limit and paid for adults of any age.

In consequence of this school boards have greatly extended their evening school work and large numbers of adults attend these schools, not only for more advanced teaching, but also for teaching of a very elementary kind. The judges, however, who heard the case stated that, in their opinion, the act of 1870 dealt only with children and that the rights of school boards were limited by that act, and consequently, that while it was quite lawful for the board of education and for Parliament to vote money for the instruction of adults in evening schools it was not competent for school boards to take advantage of those grants.

As school boards are the bodies which have done far the most in the work of evening schools, this intimation of opinion came as a matter of great surprise and threatened to close a large number, in some cases nearly all, the evening schools. In the year ending August, 1900, there were on the roll 509,000 scholars in evening schools; of these 332,000 were in board schools and 177,000 in other schools.

Of the scholars in board schools, 51,000 were over 21, about 44,000 between 18 and 21, and 73,000 between 16 and 18.

If we take the opinion of the judges in the strictest sense, all these, amounting to 168,000 scholars, or more than half those attending board schools, would have to be excluded. Even if only those over 21 were reckoned as adults enormous injury would be inflicted on the work, and every one is agreed that this work not only should not be arrested, but should be encouraged to go forward. The Government, by clauses 8 and 9, claim that they are dealing adequately with the question. They proposed that where a school board, at the passing of the act, is maintaining out of the school fund a school which it is not lawful for them so to maintain, they may apply to the education authority and pending the constitution of the educational authority they may apply to the county council, who may authorize them to continue the school on such terms as they may agree, and failing agreement, on such terms as the board of education may decide.

First of all, it may be pointed out that this clause is not adequate. What is wanted is a declaration by Parliament of what it is and what it is not lawful for a school board to do. In the case of all public elementary schools it had not hitherto been doubted that the code indicated a range within which at least all public elementary schools were entitled to teach. This is now discredited. No one questions that the recognition of adults in evening schools was a wise recognition and is doing much good in the country. We want an affirmative Parliamentary enactment that all managers of public elementary schools, board and voluntary, are legally entitled to take full advantage of all the provisions of the codes for the time being.

The code is brought before Parliament yearly. Parliament votes money yearly for the purposes of the code. Should Parliament disapprove of the code in any item no one can doubt that the Government, which depends on Parliament for its existence, would modify any clause to which Parliament seriously objected. We have therefore sufficient sanction for the conformity of the code to the prevalent opinion of the country, and have a fair claim to ask that a clause be enacted pro-

viding that school boards shall be entitled to use the school fund for the purpose of all teaching which is recognized by the codes in force for the time being.

As to the grants under the science and art department, the Government is at liberty to modify its conditions from year to year, and it has so modified them as, apart from the Cockerton judgment, to exclude school boards from benefiting by them. Some of us regret that policy, but in face of the action of those who have power to act we can only regretfully submit, and hope that, pending the day when the English democracy will insist upon being as well treated in their schools as their fellow-citizens in Scotland, the Government will administer the higher elementary education section of the code in the spirit they promised when they first introduced the minute and not in the spirit by which they have subsequently minimized and defined it away. Then, at any rate, all those who wish for as liberal a scheme of education as the law offers up to 15 will be able to obtain it without obstruction.

But suppose clauses 8 and 9 to become law—at the soonest this bill, with its numerous wide-reaching and serious innovations, can not become law till the end of July. By that date the boards and the county councils will have adjourned for the summer holidays, and even if they had not, can anyone suppose that the negotiations necessary could be rapidly completed, even if they did not result in an appeal to the board of education. Meantime all the arrangements for the autumn session of even ng schools should even now be nearly complete, and if put off till August or September can not be completed. Nothing will meet the present deadlock short of a bill of one clause, authorizing school boards which, during the session preceding the passing of the act, have conducted schools declared illegal by the recent judgment, to continue those schools for one year, and for another year if authorized by the board of education, pending the settlement by a well-considered bill of all the questions raised.

The clause under observation is also inadequate in that it only deals with existing schools, but the need for evening schools for adults is a growing one, and school boards should have power not only to continue those they have, but also to open new ones where they are necessary.

We now turn to the acts repealed. It would seem that by the repeal of the technical instruction act Ireland is left without any provision for technical instruction. But more important is the loss of the safeguards already referred to.

Sir John Gorst, in his speech introducing the bill, said that as the provisions of the technical acts were reenacted there was no longer any need for them. The following facts should be considered in connection with that statement:

In lieu of the provision of the act of 1889 prohibiting the local authority from supplying or aiding instruction to scholars in the standards in an elementary school, the local authority is now merely forbidden from making a grant to or establishing or maintaining a public elementary day school.

If a school refuses the conscience clause of the act of 1870, and thereby is prevented from being a public elementary day school, it may be aided or even maintained by the new authority. Moreover, so long as the new authority does not give a grant to the school, it may supply instruction to scholars working in the standard, and thereby intrude itself into the sphere of elementary instruction.

The technical act, 1889, made the appointment of a committee optional. The new bill makes it compulsory.

Subsection 3 of section 1 and section 2, both safeguarding the rights of school boards, are repealed.

All local authorities except county councils and county borough councils are abolished. The rights conferred by section 6 of the bill on urban authorities fall far short of the rights they enjoyed under the previous acts.

The schools for science and art act, 1891, is not repealed, but it is hard to see how, when the local authority mentioned in that act is abolished, the power given to managers to transfer their schools can subsist in reference to the absolutely new and different authority created by the present bill.

It will be noticed that by the bill, clause 1 (7) and clause 3 (1), the power to raise a rate is reserved to the council, and not delegated to the education committee. Thus while the council, by refusing to raise a rate, may cripple the operations of its committee, it is apparently intended that it shall be unable to control the application of the rate when made. This is an obscure point, coupled with the other question whether the education committee is or is not subject to section 83, subsection 2, of the local government act, 1888. Certainly county councils will not like to be ousted from the decision of such questions as to how much of the money voted by them shall be allotted to scholarships, and what the number, tenure, value, etc., of these scholarships shall be; how much money shall be spent on technical as opposed to secondary education; how much to technological and trade classes as distinct from general science and art instruction.

It may be noticed, further, that whereas school boards are subject to the greatest publicity in respect to their work, so much so that by section 87 of the act of 1870 every rate payer is entitled at reasonable times to inspect and take copies of all books and documents belonging to or under the control of a school board, there is no such power or any similar power for a rate payer to know what this new education committee may be doing. Indeed, in the largest technical education committee in England it is contended that, being a committee of the county council, all its reports and documents are confidential, and no one has a legal right to see even its minutes or inspect its accounts. As the sittings of this new body will in most cases be private, some power for the rate payer of seeing their accounts and reports is surely a matter of great importance. It is of importance to insist on this even with the present powers proposed by the bill, but in view of the avowed intention of making these bodies the elementary local authorities of the future, into which, as Sir John Gorst said, the school boards will be absorbed, the point is of the utmost importance.

As to the efficiency of the proposed committee, even for the purposes at present included in the bill:

There is no obligation on the council to find any funds. There is no obligation to provide sufficient means of education; there is no machinery, as there was in the case of elementary education under the act of 1870, to ascertain what education is needed. There is no security that the local authority shall have regard to the suitability of existing school provision, either as to premises, fee, staff, or denominational character.

It is clear that if we are to have local municipal authorities for secondary as well as for technical education we should not make an attack on municipal liberty by forcing these bodies to form composite committees on which "interests" must be represented, nor can we safely trust the discretion or fairness of the present board of education so far as to make them masters of the situation. If Parliament desires a committee of composite character it should lay down some limits within which the discretion of the council should be fettered. But it is submitted that at the present day we shall be safest if we frankly recognize the elective authorities, assuming them to be fit to be trusted, and abandon this purpose of packing a popular body with nominated associates forced on it from without for the purpose of defending interests, not of advancing education. Above all, let us not make nugatory the power of the purse which bodies imposing a rate ought to possess—the power of voting their estimates in detail and by an appropriation bill securing that the money they vote shall go to the purposes for which they vote it.

The dangerous power of subsidizing schools under private management, the obvious intention that these subsidies shall be used for elementary schools, and the consequence which may follow—that the parents, especially in rural districts, may be deprived of the power of managing the schools to which they are by law forced to send their children—make it the more essential that we should not replace the school board by a body in which the partisans and advocates of clericalism and irresponsible management shall be put in a position of vantage to scheme for the control and administration of money levied from the ratepayers without giving the ratepayers who find the money the fullest voice in its application, and securing that they have the fullest management of the schools so supported. If this bill becomes law the people, both in towns and in rural districts, but especially in the latter, must give up all hope of further progress in the schools available for the mass of the community. They will see them stunted and crippled through the jealousy of feeble schools, nominally secondary, but often inferior in all but the fee charged to the best board schools, and they will see the combination of this jealousy with clericalism and sectarianism carry out a successful conspiracy against the aspirations of those who look for brighter days for the people of England, which never needed more than now, in these days of keen international competition, the best, the broadest, the most popular, and the most expansive system of public schools for the whole community.

Public schools under public management for all, an aim which would slowly have come round but for the opposition of powerful interests, will have to be the rallying cry of the progressive section of the English people if once the existing compromise of our national system is torn up in the interest of ecclesiastical supremacy.

E. LYULPH STANLEY.

A NATIONAL SYSTEM OF EDUCATION.

[From the Fortnightly Review, May, 1901.]

Is a coordinated system of national education impossible in England—that is, a system that takes in the whole “populus” and is not concerned with the “plebs” alone? Or, leaving out the universities,¹ which can always come in later, can not some scheme be devised whereby nationally and territorially, at the center and in the localities, all our secondary, technical, higher grade, board, voluntary, and even private schools for both sexes may be brought into a real if elastic organization, and help us thereby to present an undivided front to the steady, phalanx-like pressure that better organized nations are already exercising on us, so much so, that in the world of trade, which is often the first in which the international struggle for existence makes itself manifest, we everywhere see our outposts being driven in and our lines of communication threatened, while the general effects of this growing competition are beginning to make themselves felt in the United Kingdom itself?

Our war office is often held up to ridicule as a model of inefficiency. But what should we think of it were the various branches of the service under the control “of no fewer than ten separate cabinet ministers,” whose “several departments usually scorn to consult together?”² Yet that is precisely the actual condition of our educational army. It is true that in 1899 an attempt was made to lay the foundations of a central authority, but, as will be shown hereafter, much of the work has yet to be done if order is to be evolved out of chaos. But locally the jumble of authorities and schools is far greater. Here the various educational agencies are either isolated from one another or else under authorities which are often at loggerheads. School boards wage an unremitting warfare with the voluntary schools and attempt to establish a permanent foothold in the area of secondary education. Secondary schools squabble with technical, and the committees at the head of the latter attempt to oust the school boards from their higher work, whether in day or evening schools. As for the private schools, no effort is made to encourage the efficient or suppress the incapable. Educationally in England, as far as unity and organization are concerned, we are about on a par with the heptarchy. In a good many places there are friction and overlapping, but in many more this is fully compensated for by a woeful lack of even a bare minimum of educational supply. In this hurly-burly of wrangling authorities and competing schools few have time to raise themselves above the din of party and sectarian strife, and, looking at education from the national point of view, realize that it is one of the chief duties of the State to provide adequate types of instruction for future citizens, according to the condition of life to which they are called; while the democratic ideal of an educational ladder from the gutter to the university naturally suffers from the want of cooperation among authorities and coordination in schools. The matter is not a mere question of money. We spend no less than twenty millions a year out of rates, taxes, and endowments to maintain this “hotchpotch” of educational service. To go on spending further sums to patch up the existing defects can do but little good. What we want is a system, in which nothing shall be crushed out and everything have a chance of development, or, in other words, some sort of organization in which there shall be a place for every type of education, and every type shall be kept in its place.

The Cockerton judgment of last December has brought the present confusion to a maximum. If it is upheld by the House of Lords, school boards will be altogether debarred from the province of secondary education. For the nonce, however, the Government have decided to do nothing as regards the school boards, but they have expressed their determination to proceed with their plan of creating local authorities for secondary education. If the measure is to be carried out on national lines—that is, if it is to unify and consolidate the education of the country, it is clear the Government will have to decide against any idea of a condominium, and plump for one paramount authority, whether school board, county council,³ or some new body. For the same reasons the body on which they decide will subsequently have to be made the authority for all grades of education.⁴

¹ The universities are in some cases already in the pay of the State, and therefore subject to its control; while the others—probably with the increasing need of expenditure on research—will in the long run be obliged to come to Parliament. But in the present article subordinate questions and details must necessarily be sacrificed.

² See Fabian Tract No. 105, “The educational muddle and the way out,” a masterly contribution to the present imbroglio which all should read.

³ The term county council includes, of course, also county borough council.

⁴ Cf. the resolution “in favor of one local authority for education within a given area,” carried unanimously at the recent conference of the N. O. T.

Otherwise, the jumble described above will only be intensified and perpetuated. In this article, then, we shall consider the problem in its complete form—that is, the creation of a single local authority for not only secondary, but all other kinds of education below the universities.

At first sight it might seem expedient, in order to create a really comprehensive set of local authorities, to disfranchise the county councils of their educational rights, disband the school boards, and hand over their educational duties to an entirely brand-new authority. But this suggestion, though possessing all the specious value of symmetry and completeness, would arouse the most prodigious opposition. The two authorities already in the field would fight it tooth and nail. Localities would be up in arms, and members of Parliament would voice their opposition in Parliament. All “placeholders” and officials concerned in the change, on seeing their occupation in danger of being taken from them under the bill, would join in the agitation against it. But there is another yet more formidable obstacle. Such a body being elected solely for education, would introduce into those sections of education which have hitherto been free from it all the miserable religious wrangling which has been such a marked feature of the school-board régime and has proved such a sore let and hindrance to the cause of education. But the most fatal objection of all is that such a body would be an *ad hoc* one. Now, the chief cause of the fearful tangle into which our local government had got before the reform of 1885 was the indiscriminate creation of *ad hoc* bodies whenever some fresh function of county or municipal service made itself felt. Those who believe that local politics can only be made real to the ordinary citizen when they are simple enough to be “understood” of the people at large, would strongly oppose the erection of yet another obstacle in the path of a reform which has already made considerable progress.

A brand new body is, therefore, neither desirable nor possible; but when we come to choose between the two existing bodies, we see that the school board, as one of the principal *ad hoc* bodies, falls under the condemnation of the preceding argument. And even if this reason were inadequate—and the practical man will always be ready to support an anomaly which has proved its inherent usefulness—there are further facts which effectively preclude school boards from being chosen as the local authority. To put the case in a nutshell, there are still some large towns in which the system has not been set up, more than one-third of the population of England are not in school-board areas at all, and more than half the children are in voluntary schools, which are more or less avowedly maintained to keep outschool boards. On the practical grounds of imperfect jurisdiction and of the undesirability of perpetrating, and even intensifying, religious squabbles, it would seem impossible to make school boards the educational authority.

There remains then only the county councils to act as the new authority. And here it is not merely a case of Hobson's choice. The councils themselves have much to commend them. They cover the entire country; their areas are sufficiently large to exclude the faddist, and secure a certain degree of ability and large mindedness in their representatives. They have already acquired administrative experience in dealing with secondary and especially technical education, and after a certain amount of wastefulness inseparable from the winning of their experience, they are now expending the funds at their disposal with good results.

But if the county councils are to be the universal authority, it is probable that the school boards will have to have taken from them even that which they have. This question is best dealt with by regarding the cases of the counties and county boroughs apart. As regards the counties, there would be little opposition to disestablishing the small local boards, whose confined areas have generally been against successful administration. The disestablished boards should not, however, be dissolved. Evicted as autonomous directors they might be reinstated as managers under the county council, with power to co-opt future members from the parish council or outside. The valuable experience of the members would therefore be retained and fortified at the same time by the light from above of the county council, or rather its educational committee. The latter would probably be modeled on the same lines as the present statutory technical committee, which would form its nucleus. To render it really representative of all educational interests, while remaining fully under popular control, a minority of experts from the various grades of education should either be co-opted or nominated by the school groups themselves; in the latter case the nomination should rather be made by managers or governors than by the teachers themselves. In any case no committee would be complete without representatives from the secondary, technical, board, and voluntary schools, and even representatives of the private schools, to take a leaf out of French experience, might be allowed to be present when matters affecting their interest were discussed. Women, of course, should be among the co-opted members.

The work to be done is so extensive the county council would necessarily have to delegate large powers to any important noncounty borough within its area. The apparent difficulty between these two sets of bodies, which is largely one of devolution, will probably right itself once the province of the county council has been clearly understood. In the same way, though in a less degree, powers should be delegated to the district councils; these in their turn would allow a certain liberty of action and initiative to the bodies of governors or managers of the schools within their area and under their control. But the delegation of powers must not stop here, for it is only under such a system that freedom and its correlative responsibility can exist, and freedom rightly understood is quite as vital to good teaching as to good administration. Too much red tape in the school is sure to produce mechanicalness and routine. To strictly define the duties of all is to split up the school into water-tight compartments. Such a measure ruins the unity of the school, which can only be secured when the authority in educational matters is vested in the head master. This has been deeply felt in the French secondary schools, and one of the chief proposals of M. Ribot's commission is to give more authority to the heads of the lycées and colleges. In our secondary schools we have recognized this, and have given our head masters at least a commanding voice in the selection of the staff. The same privilege ought to be extended to the head teachers in our primary schools. They ought to be the best judges of what type of assistant is best for their schools. This does not imply putting the assistant teacher more under the thumb of authority. On the contrary, his position in matters of tenure must be safeguarded, his right to a pension—whether engaged in primary or secondary teaching—recognized and secured, and, above all, he must be accorded a large liberty in his teaching methods. Unless he, too, has his sphere of liberty to turn round in, his teaching will become mechanical. There must be "play" and elasticity in the educational machine from the top to the bottom. Otherwise we shall be merely creating a hierarchy of taskmasters.

The county council would naturally possess in the counties all the rights of the school boards to levy rates, or rather the whole area should be rendered liable to the education rate, and the latter be merged in the county rate. Being the authority for all forms of education, they would naturally, with the possible exception of the private schools, have the right to inspect not only the board schools, but also those of the voluntary schools who desired to come under their régime in order to qualify as efficient. This idea of subsidizing the voluntary schools seems a bitter pill to some people. But assuming that, as they allege, the voluntary schools are inefficient, have we a moral right, from the national point of view, to allow more than half our children to suffer under permanent educational disadvantages until the voluntary schools are starved out in the distant future? Besides, are not the rights of conscience of the sectarian equally respectable as those of the secularist in the eyes of the State? We have spent thirty years in trying to ignore the religious question. The effect has been far from a success. We have not yet attracted half the children of the country into the State primary schools. Let us see if we can do better by recognizing it and making allowance for it. Those voluntary schools which accept the aid of the country will naturally submit to the county council regulations in so far as they do not touch on the teaching of religion, which can be relegated to the first hour of the day.

They will also accept the principle of public control by admitting to their board of managers representatives of the county council. Such a proceeding will greatly add to the security of teachers' tenure at these schools, and likewise effectually protect any small minority in the district from persecution. If the special-aid grant were further paid through the county council committee, the mere threat of the withdrawal of this and other aids would bring the most recalcitrant body of managers to their senses. The same grants might be withheld from those sectarian schools which, while declining to come under the jurisdiction of the county council, an action which would be quite within their rights, were also proved by Government inspectors to be below the normal standard of efficiency. In this case the central authority might close the offending school, or at least allow the county council to open an efficient one alongside. As regards the secondary schools, they could participate as usual in the distribution of the whisky money, and the technical rate (henceforth called secondary and technical), would be raised at least to 2 pence. And lastly, as regards the private schools, our supply of secondary education is still so insufficient it would probably pay the county councils to allow their scholarships to be held in such private schools as pass the test of efficiency, if they did not go further in giving aid to such schools and¹ taking into account

¹ See Memorial of the College of Preceptors to the Duke of Devonshire in the *Educational Times* for March, 1901.

their presence in questions relating to the adequacy of local supply of secondary education. Apart from any claim that "private venture" may have on the community, it is a very moot point whether the State itself does not suffer a grievous loss by crushing out private enterprise and substituting everywhere its own schools. These schools are essentially centers of experiment, and by their competition they form a safeguard against routine and lethargy in public schools. It is noteworthy that the Ribot Commission on secondary education in France strongly advocated their establishment and encouragement in districts where the State supply was inadequate.

The advantages attached to the adoption of the county council as the paramount educational authority are well-nigh incalculable. It would abate the religious difficulty, if it did not eliminate it. It would abolish the petty tyranny that sometimes disfigures small school boards and voluntary managers, protect teachers, and safeguard the rights of minorities; for the county council, being composed of men of a certain caliber and attainment, would never tolerate such excesses. Above all, it would improve the financial condition of the voluntary schools, and, by subjecting their managers to public control, induce them to take a wider view of things, while by merging the education rate in the general county or district rate, it would render the expenditure on education less unpopular. Again, in taking secondary education under its control, it would at once bring home to people the truth that secondary education is quite as much a matter of national and local concern as elementary. This unification of local authorities would lead directly to the local unification of our school supply.

The county council, as patron of all schools within its area, would not be tempted to allow its attention to be monopolized by any special type. It would frame its budget with a view to the lawful exigencies of all. It would quickly discover and correct overlapping, and where there was a lack in the supply it would do its best to supplement it, and thus in the long run we should have an educational system as intelligible as that of France and Switzerland, though by no means identical. And this is an all-important matter. Democracy, if it is to succeed, must take a deeper interest in its schools. And to enable it to take such an interest, we must make the aims of the different types so intelligible that the very man in the street may comprehend what they stand for and their value to the service of the State. Nor is the man in the street the only person affected in the matter. Much of the Philistine attitude of the middle classes toward learning is derived at bottom from their very natural inability to comprehend what the school really stands for. People will be far more ready to make sacrifices for education when they understand what it really means and aims at. And, finally, the ladder from the gutter to the university, by which we alone can hope to organize the selection of talent and thereby reorganize and recruit society, can never be really complete as long as there are rival authorities in the field, each with a rival set of ascenseurs.

In the towns the propriety of transferring the school boards to the municipal authorities may seem at first sight a more debatable step. They have done, on the whole, excellent work; they have acquired an experience which can not be gained in a day, and built up an administration that represents the expenditure of much care and thought. On the other hand, it is precisely in the towns that the overlapping is at its worst, and a determined attempt has been made to crush out not only private enterprise, but also the lower secondary schools. Thus in London during the last ten years the number of boys in the secondary schools has decreased one-half per cent, though the population shows a rise of 8 per cent. It seems that the fault of this is to be attributed to the aggressive policy of the school board. According to evidence¹ collected on the subjects the clever pupils are either retained in the primary schools beyond the age at which their transfer to the secondary is profitable, or they are unduly "hustled through" the lower standards, to the detriment of their writing and arithmetic, in order to enter the higher grade, toward which they are directed, to the detriment of the secondary schools. One does not know what the reply of the school board is to this serious charge of exercising pressure to prevent clever children from following the normal course of being passed on to the secondary schools in due season, and thereby impairing the utility of the educational ladder.² If the secondary schools are not doing their work as they ought, let the new authority be created as soon as possible to make them. But the rate payer has a right to protest against the rates being used

¹ Cf. "Notes on evidence of the effect on London secondary schools of the attempt to develop secondary teaching in higher elementary schools." By Rev. R. S. de C. Laffan.

² Of course the higher grade school, in as far as it acts as the crown of primary education, as in France, is a natural and necessary outgrowth of the elementary school, possessing, as such, unimpeachable claims on the community, and, if illegal, should be recognized as soon as possible by statute.

to found new schools to compete with existing institutions which, if they do not do their duty, ought to be made to do so, and it is quite probable that they do; otherwise the technical education board would not allow its scholarships to be held at these schools.

The plain question, therefore, is this: Are we then going to permanently allow two sorts of secondary education to grow up, both more or less professing to do the same work, but one financed if not run by the county council, and the other promoted by the school boards? From the national point of view is there any gain whatever from such a clumsy and expensive duplication? Does it not mean the perpetuation of friction and overlapping, an educational schism—in fact, the scission of the nation itself into two parties? Whereas, with one authority at the head, the problem would at once be simplified. Given a certain area, what is the supply of education on the ground? If there is redundancy, correct it; if there is scarcity, supplement it. Is the question one of popular control? Can the school board, elected on a cumulative franchise, be called a really democratic body? Does not the low percentage of votes polled at its elections—a bare one-fifth at the last London election—show, by the rough test of experience, that however much it may profess to be democratic, it only interests a fraction of democracy, whereas the county councils are, both in theory and practice, democratic and popular? We shall never have order, coordination, or popular interest in education till we have a single authority which is really representative of the people. There is, then, only one remedy. The school boards must be taken over by the borough councils, but it would be probably wise to give a term during which they might be taken over. There should, in fact, be no forced liquidation, but they should be acquired as going concerns by the borough councils, who would thus have time to look round and see how they could be gradually taken over with the least amount of educational and administrative disturbance. The best members of the school board would at once be co-opted onto the municipal education committees, in order that the loss of experience and administrative ability might be reduced to a minimum.

London itself would form a problem apart. The school-board system as a whole would be placed under the technical, or, as it would then be called, the education board. But the work in this case would be too gigantic for a single committee, even with subcommittees to aid it. While the education committee would exercise a general oversight and see that a minimum standard was everywhere observed, large powers would be delegated to the new municipal bodies, who would exercise a limited control over their own schools, and thus be able to take an interest in them. The voluntary schools would naturally be allowed, as above, to submit themselves to the inspection of the board and participate in its grants, and what has been said under the headings of co-optation, finance, etc., as regards the country, would, *mutatis mutandis*, apply to the big towns and London.

As regards the central authority, a preliminary effort has been made under the board of education act to unify the chief departments concerned with education. The education department and the science and art department have been united, and certain powers have been taken over from the charity commission—to an insufficient extent according to the headmasters' conference. The office has been divided up into elementary and secondary, with technological. The exigencies of official administration will probably make the division between secondary and technological as distinct as between it and elementary. But, apart from internal reorganization, what the office wants at the present time is a knowledge of the facts with which it has to deal.¹ Hitherto, owing to the system of payment by results, it has been overwhelmed by questions of detail and audit. Perhaps the establishment of the Block grant may set it free to study the admirable collection of reports which have been amassed by its special-inquiries section. It must utilize this knowledge to formulate principles which it should be ready to apply if necessary. To assist in this delicate task it should make full use of the consultative committee, who are the natural "go-between" between the schools and the universities. A capable secondary inspectorate is also a *sine qua non*, not only as the mouthpiece of the department, but as its eyes and ears, for a department without an adequate inspectorate is like those lay figures of whom it has been said "they have eyes and see not, ears have they and hear not."

And, lastly, there must be a wide measure of devolution to the local authorities. The ideal education office is not a clearing house through which every scrap of the education of the country should pass, but a central office for giving unity and direction to the work of the authorities beneath it. All that has been said about

¹ See R. P. Scott: "Secondary education. Legislation with special reference to problems awaiting solution," in *Education in the Nineteenth Century*. Edited by R. D. Roberts. Cambridge, University Press, 1901.

the advantage of unity and clearly defined organization applies with added force to the central authority. In many cases the localities will require the assistance of Parliament to help them to render their supply of education adequate. Their demands, clearly formulated, will enable the office, through its spokesman, the minister, to insist not only on these local needs, but to show how they are only part and parcel of the larger question of improving our third line of defense, which education represents, and for preparing for the new Armageddon—not that dreamt of by theologians—which awaits us in the near future.

The education question is really only an outcrop of the fundamental problem of national life and welfare. It is from the national, or rather international, standpoint alone that we can realize the supreme need of unification and consolidation at the present juncture. During the last fifty years the political policy of the States that make up the civilized world have profoundly changed. It seems hardly likely that we, who form an integral part of that world, can remain unaffected by these alterations, although, from a false sense of security, we may for the moment prefer to ignore them and refuse to shape our policy to suit the new outlook. Speaking broadly, however, it will probably not be contested by thoughtful men that we have been passing through and are now passing out of a period of *laissez faire*, and are willy-nilly, being forced once more into a cycle of state control. It seems strange that in many ways the old-fashioned Liberal and Radical party, who represented the *laissez faire* doctrine at home, should have been the chief means of precipitating this change abroad. By their deep loyal and unwavering sympathy for oppressed peoples, whom they regarded rather as mere aggregates of individuals, they have given an enormous impetus to the growth of nationalities. While they thought they were helping to emancipate downtrodden sections of humanity, they were really assisting in the birth or development of states and empires which must henceforth be reckoned with in the struggle for our own national existence. To take only a few instances. Had Great Britain withheld her aid from Greece, her sympathy from Italy, thrown herself on the side of the Southern States against the Northern, backed France in 1870 and retarded thereby the consolidation of the German Empire, it is very probable that the period of *laissez faire* might have been prolonged in this country. More organized than many of our neighbors, though loosely organized, we should not have felt so shrewdly the need of further organization.

But when Germany, in 1870, suddenly stepped into the front rank of nations, *laissez faire* was doomed. The power which had largely built up its unity through its commercial policy of the Zollverein was little likely to rest content with this internal victory. Having set its house in order, it had every right to dream of a *Weltpolitik*, and this it has henceforth pursued with that sheer, dogged, determined diplomacy which only retires in order to advance in better order, and which surmounts or circumvents the most formidable obstacles by its unfailing consistency. It was not long before the new force began to make itself felt in neutral markets. And since commerce represents one of the main items in our national livelihood, this new form of competition caused much ado in England. The United States have pursued a similar policy. Its great capitalists have forced on the country a protective tariff, and what is more serious, believing that Providence is on the side of the big battalions, have combined among themselves instead of practicing the cut-throat competition à outrance dreamed of by the old economists, whose morality is summed up by the phrase *homo homini lupus*. The battles of commerce are often decided by the last "sou," for it will pay any trading corporation to run a thing for a time at a loss if it implies the ultimate ruin or squeezing out of their competitors. How are the richest firms and companies in England to stand up for long against trusts which, in some cases, represent an entire industry in America, financed by syndicates with illimitable wealth, drawing enormous profits from the home markets that they can afford to employ in underselling abroad, and backed up as well, as they probably will be in the near future, by State bounties or subsidies for American shipping lines?

But it must not be for a moment supposed that the commercial warfare that neither slumbers nor sleeps is a mere matter of protective tariffs or subsidies. The nation which merely goes as far as this resembles the rich man who thinks he has done all that is necessary to do for charity by sitting down and writing out a handsome check. A tariff is only a fortification for those who, like the Americans or Germans, know how to fight behind it. A subsidy is only a grant-in-aid to those who know how to use it. And so the State which succeeds is not that which hedges itself round with a Chinese wall of tariffs and fancies it can then go to sleep. No Chinese or Roman wall ever kept the invader out by itself: but the nation which, behind the wall, taking for its motto Wentworth's "Thorough, thorough, thorough," both individually and nationally, does its best in attempting

to build up, reconstruct, or improve its internal organization, to help it, as it were, to make the core yet harder than the rind. Hence, to confine ourselves to Germany, the appearance of State activity in every quarter. First and foremost in education, then in questions of hygiene, State insurance and old-age pensions. Call it paternal if you will, but it is never grandmotherly, for it is the result of the experience of a civil service which for trained intelligence is the ripest in the world.

• We could not, if we would, servilely copy German methods. As Sir John Gorst put it the other day, we can not wear each other's clothes. They will always be a startling misfit for the other party. But we can make a suit for ourselves. The political reforms of the century in this country have been mainly directed toward placing the tools of power in the hands of the democracy. It has been a great and a bloodless revolution. But the millennium that early reformers dreamed of has not been the necessary corollary. The ruling class, and rightly, is still the ruling class. But it must learn to march with the times. We want, in these days of international competition, something more than a strong army or navy to make the nation strong. Such things are essential, but they are only a means of insurance against loss. They represent the nation's "land and water" police, but those who hold that the State should not only be the protector but the promoter of public welfare can not be content with this alone. If evolution has one lesson for us, it is that by taking thought we may improve the race. The cry for improvement is growing. On all sides and in all quarters we hear more and more imperative demands for reforms, whether for better commercial or secondary education, housing, licensing reform, or old-age pensions. All these and many more are symptoms of the national malaise. What the nation wants is coordinating and leveling up all round. Here is the statesman's chance, not to propose an unwieldy Newcastle programme of isolated reforms, much less to attempt to stave off the crisis by niggling measures of concession; but, seeing the question as a whole in all its diverse manifestations, to bring in a series of measures that interlock and are inter-related, that represent, so to say, a veritable code, for all these problems are closely, at bottom, akin to one another, and their correct solution depends on these relations being rightly understood in reference to each other and in reference to our attitude toward the attitude of other nations. Otherwise we shall go on being beaten "in detail" till the end of the chapter.

But the belated protest may be made that we, as a nation, are refractory to the notion of State control. Such a statement is made by people with little historical knowledge. It was the State control of the Conqueror that made England, of Edward I that consolidated it, while that of Elizabeth not only resettled the country but laid the foundations of Greater Britain and gave her children the chance of going out to seek their fortune beyond the narrow seas. The last reign is particularly to the point. Beginning in difficulties and weakness, it ended in glory and power. And why? Because the statesmen of the day, finding the country weak, poor, disunited, first inquired into the many evils under which it was suffering, and then, by no piece-work and patchwork measures, but by a comprehensive system of legislation, whose success was largely due to the fact that they clearly saw how the solution of one social problem depended on that of another, they set the country once more on its feet; and this social legislation was only destroyed by the revolution of 1648, which was the true beginning of *laissez faire*.

Yet none the less we must not forget that this *laissez faire* was historically necessary. It insisted upon the emancipation of the individual, it upheld his claim to think for himself, it vindicated his rights of conscience. For these hard-won rights we can never be sufficiently grateful. The society of the Middle Ages, except for the church, was a static one; the principle of *laissez faire* introduced, or rather embodied, the "dynamic" element in society. Through this door came the idea of progress for the race and the career open to talent for the individual. The bad side of *laissez faire* has been its neglect of, and contempt for, the State, of which the weak have even more need than the strong, for without its protection the stronger soon weary of fighting among themselves and combine against the weak, so that the latter, who in mediæval times had always a place in society, have now sometimes no definite place at all.

But all progress largely depends on taking and combining the best in two rival systems, and so if we are to have State control in this country we must attempt to preserve at the same time all that is best in the *laissez faire* doctrine. And the same is true of educational reform. Unification of education must come, but State control should not be established at the expense of losing all our freedom, elasticity, and variety, otherwise the solution will not even be a temporary *modus vivendi*, but rather a cause of national decay.

CLOUDESLEY BRERETON.

CHAPTER XX.

THE PUBLIC SCHOOL PROBLEM IN THE SOUTH.¹

By CHARLES W. DABNEY, Ph. D.,

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The South waiting for education.—Everything in the South waits upon the general education of the people. Industrial development waits for more captains of industry, superintendents of factories, and skilled workmen. The natural resources of the Southern States are great and varied; capital in abundance is ready for investment in them; only men are wanted who can plan, organize, and direct. This is true of all our industries, even of our agriculture. A director of an Agricultural Experiment Station says: "We can do little more to improve the agricultural methods of the farmers until a new generation is educated, who can read our bulletins, apply scientific methods, and keep simple farm accounts."

The colleges for liberal, and institutions for scientific and technical education as well, wait for preparatory schools and high schools. With the same population there were during 1899 in all collegiate and graduate courses in liberal arts only 16,351 students in the Southern States against 30,741 in the North Central States, where they have public high schools. A system of public education is a pyramid; the primary schools are the foundation; the secondary schools and high schools, the normal schools, the technical schools, and the colleges carry up the structure step by step, and the university is the capstone. Our old system of education in the South, so far as we had any, was a Greek column; the university was a beautiful carved capital of classic design, supported by a slender column of literary colleges and academies, which stood upon a narrow and unsubstantial base of private schools.

The effects of war and reconstruction.—Good government in town and State and intelligent action in national affairs are impossible without educated voters. Pettifogging politicians, selfish demagogues, and corrupt lobbyists will continue to control our legislative and county governments until a majority of the voters can read and think for themselves. The Republic must have an educated citizenship or go down. The question of educating all the people is more critically important to the South than it is to the remainder of the nation. We must educate all our people, blacks as well as whites, or the South will become a dependent

¹ Address delivered at the Fourth Conference for Education in the South, held at Winston-Salem, N. C., April 18-20, 1901.

Appended to this address is a statement, by Hamilton W. Mabie, showing the character and aims of the Southern Conference, and giving some general idea of the great educational movement it has inaugurated in the South; also brief accounts, by Robert C. Ogden and Walter H. Page, of the two boards which have been formed by the conference and are the outgrowth of it, as it were; namely, (1) the Southern Education Board, an investigating and "preaching" board for carrying on a propaganda of education, and (2) the Board of the General Education Fund, composed of business men, to provide funds and to follow up and give effect to the work of the propagandists. A bill is before Congress to incorporate the latter organization under the name of the General Education Board.

province instead of a coordinate portion of the nation. What, for example, is the cause of the present complete isolation, of the almost entire exclusion from the councils of the nation, of a dozen States which for a long time supplied a majority of the statesmen who directed the affairs of this country, unless it is the political ignorance of their successors, illustrated persistently by the pursuit of absurd financial theories and antiquated political hobbies? The only remedy for the political situation in the South is to be found in public education.

Even religion waits upon general education. How else can we interpret the action of our enlightened and progressive churches, many of which are now actively at work raising their twentieth century educational funds? Evidently they think that the further extension, purification, and strengthening of religion in the South depends also on general education.

This study was undertaken out of a desire to get a true conception of the condition of the public schools in the South, which might be the starting point for efforts at improving them. The writer sincerely hopes that no one will think, because he has tried to tell the truth as he sees it, that he takes a pessimistic or despairing view of the situation. In most aspects the situation of the public schools in the South is indeed a sad one. It is not proposed to discuss at length here the origin or the causes of this state of things, for everyone who knows our history understands them already. The South emerged from the civil war thirty-six years ago, having lost one-tenth of all her white males and three billions of property, which was nearly all her accumulated capital. Reconstruction was even more desolating than war. The spoiler not only stole everything that war had left, but, as Judge Jeremiah S. Black has said, "by their devilish ingenuity they succeeded in running their felonious fingers into the pockets of posterity." They not only looted the treasuries, squandered the school funds, and raised the taxes so high that a general system of confiscation ensued, but in their insatiable lust placed bonded debts upon the Southern States aggregating over \$300,000,000. A debt was piled upon the State of North Carolina, for example, of about \$38,000,000, which was nearly one-third as much as the total valuation of all its property; upon Alabama they put a debt amounting to over \$18,000,000; upon Tennessee one of over \$14,000,000. They squandered \$140,000,000 for Louisiana and increased her debt \$40,000,000!

But why do I recount these awful things? Simply to explain once for all at the opening of this paper why Southern people have not actually done more for public schools, and especially why they hate all taxgatherers and distrust all schemes for the "public welfare," which they understand to mean for the private gain of the schemers. This experience explains our present narrow constitutions, which render it almost impossible to have efficient schools. It explains the intense devotion of Southerners to the laissez faire theory of politics, and their radical applications of the principle of local self-government. It throws light as well upon much of the opposition in early times to our public schools, which seemed to the Southern settlers to be somewhat inconsistent with their theory of individualism.

But the Southern people are too brave and energetic a race to live forever in the shadow of a great sorrow and under the burden of a great wrong. The restoration and recuperation have been rapid; there never was anything like it. The census of 1880 showed that the South had gained nearly \$5,000,000,000 in the assessment of property; in the next ten years she gained 50 per cent more, against 22 per cent in New England and in the Middle States. Since 1880 the production of cotton has doubled and the manufactures of all kinds have been more than quadrupled. The capital invested in cotton manufacturing has increased twelvefold in ten years. Thirty thousand miles of railroads have been built in fifteen years and over \$1,000,000,000 expended upon them. The coal products have increased fivefold and the production of pig iron in this section has increased from 400,000 tons to over 2,000,000 tons. These figures are only pointers; the progress has

been equally great along all other lines. The people of the entire South are now able to have better schools.

Believing that the Southern people have at last overcome most of the financial and political results of war and reconstruction, I hold that the time has come when we must begin seriously upon the work of reconstructing Southern society in all its departments, and that the first thing to do is to establish schools for all the people. God knows we remember the past, even those of us who were nothing but children remember it, and we would not forget or have our children forget any of the lessons of those days, and least of all the inspiring examples of their heroic grandfathers; but our faces are toward the future, and in preparation for the work of rebuilding our institutions it is our duty to study the facts as they are, blinking nothing of the truth, however unpleasant. Some politicians find it desirable to flatter the people and try to make them feel as comfortable as possible in their present position, but all thinking Southerners know that our public schools are a disgrace and such persons demand the truth, and will be glad to learn how to make them better.

The country schools.—The South is an agricultural section. Its people live in the country and work in the country; they must, therefore, be educated in the country. In most respects this is a happy condition, but in order to realize all the blessings of rural life we must have good schools in the country. My investigation and discussion will therefore be chiefly confined to the country schools, the free schools for the masses of the people.

In the old South the better country neighborhoods had many excellent private schools, which educated the children of the wealthier families in classics and literature and trained a race of men and women who have not been surpassed in any age or land. But these schools, which were never general, have now disappeared almost entirely, and at present in the country districts of the South we have just enough public schools to destroy completely the private schools.

Let us seek first to get a general view of these country schools and to learn what progress, if any, has been made in the last quarter of a century. Table I contains a statement, compiled from data supplied by the Commissioner of Education, showing the condition of the public schools in the former slave States, from Delaware to Texas, and including Missouri and Arkansas, in the years 1875, 1885, 1895, and 1900. Between 1875 and 1900 the population increased from 16,000,000 to 27,000,000. Teachers are twice as numerous as in 1875, females having increased far more rapidly than males. There are also nearly twice as many schoolhouses in 1900 as there were in 1875. The value of school property has been nearly quadrupled. The average value of property per school has been nearly doubled. Here is some progress, but we should remember that it is progress from a condition in 1875 of almost nothing. The average number of days the schools are kept has increased but little—from 93 to 109.6. The average annual pay of teachers has decreased from \$175 in 1875 to \$158.75 in 1900. The total expenditures have been doubled, but the amount expended per capita, which was 81 cents in 1875, is only \$1.34 in 1900, and the amount expended per pupil enrolled has increased only 12 per cent in twenty-five years—\$8.56 to \$9.72.

We find thus that while the schools and the school-teachers have multiplied, it has not been in proportion to the enrollment. Much money has been invested in school property, but the compensation of teachers has diminished, and the amount expended per capita is still pitifully low. Worst of all, the schools are still open, upon the average, only five months in the year. Should not the people of the South ask themselves seriously whether they have made the same progress with the schools that they have in other respects? Have they done all they could for the schools?

Compared with North Central States.—Compare with this the situation in the North Central States (Ohio to Kansas, Nebraska, and South and North Dakota)

in 1900. These States contain a million fewer people, but had the same number of children enrolled in the schools. The percentage of the school population in average daily attendance is 52.50 in the North Central States as against 40.32 in the Southern States; the total number of teachers is 181,916 against 127,577; the number of schoolhouses is 105,118 to 96,849; but the value of school property is \$230,391,589 to \$67,473,853. The average number of days schools are taught is 155.6 in the North Central States to 109.6 in the Southern States; the average salary of teachers per month is \$43 to \$31.75; the total expenditures in the North Central States are \$84,802,319 to \$36,280,166 in the Southern States, which is \$3.23 per capita of the population, or \$20.85 per pupil in attendance in the North Central States against \$1.34 per capita of population and \$9.72 per pupil in attendance in the Southern States. We should remember that the Southern States include a population of over 7,000,000 negroes, and were devastated thirty-six years ago by a terrible war. The comparison is not perfectly fair—few comparisons are—but it shows what this population can do and what the results in wealth productions are, and sets a standard toward which the Southern States should strive to build.

Conditions in typical States.—Table I does not, however, give us a correct view of the situation in that portion of the South in which we are particularly interested, namely, the Central Southern and Gulf States. In this table are included statistics for the border States of Delaware, the District of Columbia, Maryland, Virginia, Kentucky, and Missouri, in which the conditions are much better than in the other Southern States. These States bring up the averages very much. For this reason I have prepared, after the same plan, a second table, based upon the latest information obtainable from the State superintendents' reports of North Carolina, Georgia, Alabama, and Tennessee, which are typical Southern States. The reader is invited to examine it very carefully. From the standpoint of the schoolman the situation is sad beyond expression. In North Carolina only 30 per cent of the children are in daily attendance upon the schools; less than 60 per cent are enrolled in them, and the annual school term is less than seventy-one days. There are in North Carolina on the average 65 enrolled pupils to each school and 54 to each teacher. The schoolhouse which is supposed to shelter the children is valued at \$179.60, and the teacher who has charge of them receives \$23.36 a month for seventy and eight-tenths days, or about \$77 for the term. The amount expended per year per pupil in attendance is but \$4.34, which is only 51 cents per capita. In Tennessee less than half of the children between 5 and 18 years of age are in daily attendance; only 70 per cent are enrolled in the schools; the school term is only ninety-six days, and the enrolled pupils attend an average of only sixty-three days in the year. In Tennessee they are taught in a schoolhouse which cost \$426, by teachers who receive an annual salary of \$134. The total expense per pupil is \$5.17 a year, which is only 87 cents per capita.

Tennessee and Iowa compared.—In Table II, by the side of the figures for Tennessee, I have placed the figures for Iowa in 1899. The comparison is not perfectly fair, but it will be well to see what another younger State of about the same population is doing for its schools. This State contains a slightly larger population than Tennessee, but somewhat fewer children. The enrollment in the schools in Iowa is 87.5 per cent of the school population, against 70.1 per cent in Tennessee. In Iowa 57.3 per cent of the school population are in daily attendance, against 49 per cent in Tennessee. Teachers number 28,694 in Iowa to 9,195 in Tennessee; the schoolhouses are 13,836 to 7,185; the value of school property is \$16,908,076 to \$3,063,568. The average value of school property is \$1,222 in Iowa to \$426 in Tennessee. The average number of days the schools are kept is one hundred and fifty-eight in Iowa to ninety-six in Tennessee. The average teacher's salary is \$45 in Iowa to \$31 in Tennessee, and there are three times as many teachers in Iowa. The total expenditures are \$7,978,060 in Iowa and \$1,751,047 in Tennessee. This is \$3.80 per capita of population or \$21.89 per pupil in attendance in

Iowa, against 87 cents per capita of population or \$5.17 per pupil in Tennessee. The total real and personal property per capita, according to the census of 1890, was \$1,196 in Iowa and \$502 in Tennessee. Can we not quite fairly say that this is due in great part to the difference in the public schools?

The penalty of poverty.—The stranger is astounded at this statement of facts. Why is it that a good, brave people tolerate such a condition of things? The explanation is found in the figures at the bottom of the table. The Southern States are only sparsely settled after all; in 1900, North Carolina had only 39, Georgia 37.5, Alabama 35.4, and Tennessee about 48.4 persons to the square mile. The roads are poor, with the result that in many sections the children can not get to schools. But this is not the true explanation; the poverty of the people is the immediate cause why the schools are so poor. The total real and personal property per capita returned to the census of 1890 was \$361 in North Carolina, \$464 in Georgia, \$412 in Alabama, and \$502 in Tennessee; and this is far in excess of the taxable values. In Tennessee, for example, the taxable values in 1900 amounted to only \$266.66 per capita. Tennessee is properly considered one of the richest Southern States, but the total valuation of all her real and personal property for the purposes of taxation in 1900 was only \$472,000,000, or, deducting railroads, telegraphs, telephones, and such property, only \$260,000,000. The total State tax on real property yielded in 1900, net of expenses, only \$1,000,000; the total receipts from all sources were only \$3,120,000. The total indebtedness of Tennessee is nearly \$17,000,000, and the interest about \$700,000 per annum. No wonder that its total expenditures for public schools were only \$1,751,047.

Education and crime.—Our Southern States have still to learn that education is the highest concern of a people, and that the first duty of the State is to provide schools for all its children. The business man on scanning the ledgers of these States would, however, be bound to declare that their chief concern is not education but criminal prosecutions. In the year 1895, for example, the county of Knox, in Tennessee, paid \$37,000 to prosecute 2,668 mostly petty criminal cases; and in addition to this the State paid \$17,000 toward the same prosecutions, making a total of \$54,000, or \$20.35 a case. This was simply the cost of prosecution; it did not include the cost of supporting the convicted criminals in prisons. There were 2,668 prosecutions in a population of 74,000, or about 1 in 24! Among the people in our jails are 8 illiterates to 1 who can read and write. In our penitentiaries there are 6 illiterates to 1 who can read and write. Now, one-half of the people prosecuted in Knox County were of school age. One-half the cost of prosecuting these cases would have sent nearly 10,000 children to school for the full annual Tennessee term. Can we doubt that if this money had been expended for the education of the people we would not have had to send them to jails and penitentiaries? Since certain reforms in the methods of criminal prosecutions and the establishment of an industrial school matters are much better in this county.

The wastes of ignorance.—The Southern people are poor, many of them extremely poor. Their schools are poor because they are poor; but the converse is equally true—the people are poor because the schools are poor. The relations between the opportunities for education and the production of wealth are now so well understood that we can measure the wealth-earning power of a people by the school privileges which they enjoy. Statistics show that the power of a people to earn money is in direct proportion to the length of the period the average citizen has attended school. To paraphrase Dr. Curry, the secretary of the Peabody board, a people's poverty is the most unanswerable argument for the expenditure of any amount of money necessary to give them good schools, for the right kind of schools are the only remedy for poverty as well as crime. The Southern people are too poor to afford the wastes of ignorance. If they spent more money for education, they would not only save much in criminal prosecutions, but would increase enormously their earning power.

What the schools are now doing.—So far we have considered only the general conditions of the Southern schools. Figures expressing totals and averages can not, however, tell the whole story. They are like the numbers standing for the pulse beat, the respiration, and the proportion of red corpuscles in the patient's blood; they give only a general idea of the condition of the sick man. Before we can diagnose the disease we must study his nature carefully and observe his symptoms closely. Let us therefore seek next to ascertain what the public schools of the South actually are and what they are really accomplishing. I will use the schools in Tennessee to illustrate the results of their work.

In 1900 there were in Tennessee 7,185 public schools, with 9,195 teachers and 485,354 pupils enrolled. The total enrollment in the different grades was as follows: First grade, 119,000; second grade, 78,000; third grade, 70,000; fourth grade, 67,000; fifth grade, 49,000; sixth grade, 17,000; seventh grade, 11,000, and eighth grade, 7,000. The large dropping off after the fifth grade is due to the fact that the ordinary primary schools have only five grades, and the three additional ones have to be provided by special local taxation, which is optional. As a result only 1 school in 10 has the three additional grades. There appears to be no way of finding out how many pupils complete the course. Engraved certificates are issued to pupils who complete the fifth and to those who complete the eighth grades. These are sent out from the State superintendent's office gratis upon request, but his records show that during the year 1900 only 1,959 diplomas were issued for the fifth grade and 679 for the eighth grade. More pupils doubtless completed these grades, but there is no record of it. In any case we know that only one-tenth of the enrolled pupils ever reach the beginning of the fifth grade, and only 1 in 70 reaches the eighth grade.

How we are educating a citizen.—Enrollments are also reported by subjects. Taking elementary algebra as a test subject, we find that only 16,000 were enrolled in that; in "higher English," a sixth to eighth grade study, only 11,400 were enrolled. The facts all go to show that the children do not stay in the schools. An easy calculation leads us to the conclusion that the average citizen of Tennessee gets less than three years of this kind of schooling in his entire life. In a similar manner it may be shown that the average citizen of North Carolina gets only about two and six-tenth years, and of Alabama two and four-tenth years of public training. This is the way we are educating the citizens of the Republic—the voters who are to help to determine the destinies, not only of this people, but of millions of others beyond the seas. Have we not missionary work enough to do here at our own doors without going to Cuba, Porto Rico, or the Philippines to find it?

Compulsory attendance.—According to the latest Report of the Commissioner of Education, 32 States and Territories, containing 64 per cent of the population of the country, have laws requiring school attendance for from eight weeks to the full term for an average period of eight years. England, Scotland, Canada, and nearly all the British colonies; France, Austria-Hungary, Switzerland, Italy, and Germany all require from four to ten months each year for a like period. So far no Southern States except Kentucky and West Virginia have compulsory attendance laws. Some interest is, however, arising in the question in other States. The subject is being discussed in North Carolina and in Tennessee, and the general assemblies of three States have been requested to enact compulsory attendance laws. In North Carolina, out of 700 farmers, manufacturers, and laborers who replied to an inquiry sent out by the Commissioner of Labor, 564 favored such a law. One thing is certain, ninety days' school with an average attendance of only 30 to 40 per cent of the school population will never educate the people.

The laws designed to disfranchise illiterate whites and blacks are likely to have a beneficent influence upon the educational situation in the South. Such laws, if impartially drawn and fairly carried out, will do almost as much good in promoting the elementary education, of males at least, as compulsory laws. The unedu-

cated people of the Southern States; both whites and blacks, esteem their ballot to a degree that is almost ridiculous. In States like North Carolina, where the educational qualification has been applied, the colored people are already showing an earnest desire to get the little education required to qualify as voters. But these laws, even at best, touch only one-half the population. The only perfect solution of the problem is a compulsory attendance law carefully designed to reach every healthy child. We must put all the children in school, but before we do this we must have the schools and the teachers.

The secondary schools.—Many of the cities and towns have good high schools, but there are no public secondary schools, properly speaking, in the country districts of the South. Two years ago in Tennessee a law was passed allowing counties to levy a special tax for high schools. So far as I know, however, not a single one has been organized. Mississippi is more fortunate. As the result of an act passed in 1899 one high school has been organized in Jefferson and funds amounting to \$6,000 have been provided, in part by the State and in part by county taxation. There are eight teachers: the principal's salary is \$1,200; the other teachers average \$450. At the beginning of the second year there were 170 pupils. The school prepares its students for the State university. Here is a successful experiment worthy of imitation by all rural communities in which there is population and wealth sufficient to support a high school.

Teachers and their pay.—There is, of course, small opportunity in the country for the professional teacher or even the habitual teacher. Who is going to prepare himself to teach for the pitiful salary of from \$23 to \$31 a month for five months only in the year; or who that can do anything else is going to continue at this very long? Of what use are normal schools until teachers are paid living salaries? The result is that the country schools have to employ "makeshift" teachers, the majority of them inexperienced young people who have had no training beyond what these schools themselves give and who use the school only as a stepping-stone to something better. The young man wants to earn a little money to pay his way at a business college; the girl to earn something to support her in a seminary for a few months. Too often the teacher is some director's dependent sister-in-law or aunt, or some male ne'er-do-well who must be kept out of the poorhouse. The best teachers are the farmers' boys and girls who teach during the fall and winter and work during the spring and summer. There is, of course, no prospect of improving this condition until better salaries are provided.

The courses of study.—Extensive courses of study are proposed for the schools in the laws of all the States. Here is the Tennessee course: "There shall be two classes of district schools, designated respectively primary schools and secondary schools" (the primary schools cover five, the secondary schools three, years). "In every primary school shall be taught orthography, reading, writing, arithmetic, grammar, geography, history of Tennessee, history of the United States, including the Constitution; vocal music and elocution may be taught; and no other branches shall be introduced, except physiology and hygiene with special reference to the effect of alcoholic drinks and narcotics and cigarette smoking. The directors of each school district may establish therein one or more secondary schools, in which shall be taught the following branches: Orthography, reading, writing, arithmetic, grammar, geography, history of Tennessee, history of the United States, including the Constitution, and the elementary sciences of geology and agriculture, and elements of algebra, plane geometry, natural philosophy, bookkeeping, physiology, and hygiene, civil government, and rhetoric. Practice shall be given in elocution. Vocal music may be taught." This is a fair sample of what is undertaken in the country schools of the South. All this is proposed to be done in eight short years of four to five months each, by a teacher who received \$31 a month and at a total annual expenditure of \$5.17 per pupil. Of course, it is not done; it can not be done. As a matter of fact, teachers usually

teach whatever they choose or whatever they fancy themselves best fitted to teach. In the almost total absence of expert supervision they do what they please. Perhaps half do the best they can; the other half "keep school." Thus it is the courses of study are chaos.

The schools are very imperfectly graded, if they are graded at all, and the most antiquated methods are in general use. The traditions throughout this section are those of the old-fashioned literary teacher, with the result that the idolatry of books is the bane of all the schools. Twenty millions of people engaged chiefly in rearing plants and animals, and almost nothing taught in our rural schools in regard to plant and animal life! Several of the States require that "scientific agriculture" shall be taught, but for the want of competent teachers very little is done with either nature study or science.

One hears a great deal in the South about its natural resources and their development. Shall we not realize that our great resources—our soils, minerals, and timbers—are useless in the hands of an untrained people? We should recognize that our children are our greatest resource and that the first thing to do is to train them in natural science and the industrial arts, so that they may utilize these resources. Nearly all the arts and industries were represented upon the old-time Southern plantation. The tannery and the shoe shop, the corn and flour mills, the spinning and weaving houses, the cooper and the blacksmith shops, were the technical schools of the people in those days. In these home factories both the white and the colored youth learned many of the arts. Now the manufactures are all concentrated in the cities, with the result that the young grow up ignorant of all industrial arts except the cruder processes of carpentering and agriculture. We must make money before we can even have schools, and the very first thing is to train our people to produce. The book education we give them leads too many away from the industries in which they must make their living into professions already crowded. Moreover, if we do not educate our own people to use these resources intelligently, the skilled men of other States will come in and do so, and make our native population the "hewers of wood and drawers of water" in their industries. We shall then be reduced to an industrial dependency even worse than our present political and commercial dependency.

The improvement of the public schools of the South will come through industrial development. Of all peoples in the world, therefore, we need industrial education; but before we can have it there must be a complete revolution in methods. Book teaching must be replaced in large part by nature study, and simple industrial arts must be introduced in all public schools. It will be exceedingly difficult, however, to do this. The people are by nature very conservative. The normal schools, colleges, and universities are still devoted chiefly to literary work, and turn out few teachers of science and none of manual training. The revolution must begin, therefore, in the higher institutions—in the normal schools and colleges. They must be largely remodeled before we can even begin to educate the kind of public-school teachers we need to make the new schools.

Expert supervision needed for the country districts.—Expert supervision is almost wholly wanting in the country districts; and this trouble seems, unfortunately, to be inherent in our system of government. In the Southern States either the county or the district is a unit of school government. The county is the unit in North Carolina. The district is the unit in Tennessee. The trouble is the same in both cases: The intelligent, educated people are rarely permitted to direct the schools. The school directors are elected either by the people or by the county commissioners. In very few of the States have the State boards or State or county superintendents any adequate authority over the school directors or county supervisors. Elected usually for the purpose of securing the appointment of certain persons to be teachers, to award a contract to build a schoolhouse, or for some other selfish purpose, the school directors are rarely the best men for these posi-

tions. The laws make no requirements as to their qualifications beyond reading and writing, and frequently they are entirely incompetent. Too often they are elected for political reasons and seek to use their positions to further the interest of some county clique. To illustrate: A certain school director closed a school suddenly in the middle of a term to punish an assistant teacher for voting against his faction. The teachers sued the directors personally for the balance of their salaries and won their case in the courts, but all the directors proved insolvent and the recoveries had to be made out of the school fund. A serious abuse is the division of the districts and the multiplication of small schools. The motive for this is to meet the convenience of influential people, to make new salaries, or sometimes to sell a lot and build a new schoolhouse. In some States the investments in school property are out of proportion to the funds expended for the other purposes of the schools. In Tennessee, for example, there are 3,084 school districts with 7,813 schools, or an average of $2\frac{1}{2}$ schools to each district. In these 7,813 schools there are only 9,195 teachers, or 34 enrolled pupils to each teacher. This division of money and forces where so little is provided is worse than folly. It is a crime. In the more intelligent communities a reaction has already begun, with the result that the people are asking to have the schools consolidated. With the establishment of good roads it will be possible to convey children to school at public expense and to consolidate them still further.

The county superintendent.—The county superintendent is elected either by the people of the county, the county supervisors (in North Carolina), or the county court (in Tennessee). The county court, made up of magistrates elected from the different districts, is a miniature legislature, and is usually made up of local politicians. This court divides the county into school districts and levies and distributes the local tax, and is thus responsible for the success or failure of the schools. They are generally treated as of minor interest, the most important things being the court-house offices, the "pickings" in the magistrates' courts, and the jobs in public works—bridges, roads, etc.

The trouble about the county superintendent is threefold. The first trouble is the method of his election. The Tennessee law says he must be a "person of literary and scientific attainments, and when practicable of skill and experience in the art of teaching," and provides for his examination by a committee of citizens; but as the county court elects him no way has been found to enforce even these limited requirements, with the result that the place usually goes to some political striker, briefless young lawyer, broken-down preacher, or other person incompetent to earn in any other way the average Tennessee superintendent's salary of \$296 a year. There are, of course, exceptions. A few counties pay better salaries and command the services of better men.

The second trouble is that the tenure of office is short and uncertain. If we once get a capable and faithful officer it is almost certain that just when he begins to develop some efficiency he is compelled to abandon the management to one to whom the whole business is entirely new. The rule "he has served his two terms" usually applies here as to other county offices. If the superintendent is an honest and independent man and insists on weeding out the incompetent teachers, he is almost certain to make himself unpopular and to lose his position to a more complacent competitor.

The third difficulty is the small salary. In South Carolina the average superintendent's salary is \$423; in Tennessee it is \$296. One thousand dollars is about the largest salary paid in any county not containing a large town. These are the men who hold examinations and issue certificates to teachers. One may judge how people regard their schools when salaries like these are paid to the men who should be responsible for them.

State superintendent of public instruction.—The State superintendent of public instruction is elected by the people or the legislature or appointed by the gov-

error. In nearly all cases he is more or less involved in politics. A few States have State boards of education, but they can do very little under this system of local government. A State superintendent appointed by the governor is apt to be a politician, and his chief energies to be devoted to advancing the interests of his party. Election by the people has given us some of our best superintendents, and is the plan to be preferred until we have properly constituted State boards of education to elect them.

The people of the South have still to reach a just conception of the importance of this office. It is usually treated as if it were one of the least important offices in the State and has attached to it one of the smallest salaries. A State educational system is or should be a great business, and the State superintendency calls for a skillful business man as well as a learned educator. The man who fills this office should be competent to direct county superintendents, principals of city schools, local boards of education, and school directors; advise the legislature about school taxation and legislation, and secure and distribute adequate appropriations; he should, in short, be to the State system what a president is to a great university or a bishop to a diocese of the church.

The curse of politics.—The great curse of our public educational system, as of most things in our States, is politics. From the school directors up to the State superintendent politics is the blight of our school administration. Listen to these words from a former superintendent of public instruction of North Carolina. Speaking of the county superintendents, he says: "Why have not the men best qualified to fill these positions been elected in every county in North Carolina? I am sorry to tell you why, should you not already know, but I will do it. Politics was the cause and is the cause to-day." He continues: "The public schools have been in the galling grasp of the court-house politicians for twenty years. The county supervisor owes his election both directly and indirectly to the county officers. They are the men he is supposed to serve; they are the men to whom he must render an account of his stewardship. Away with such! Let us break away from this court-house ring business." Brave man! Would there were more like him.

At the bottom of it all is the want of serious interest in the public schools among the body of the voters. When the people realize their value they will be ready to give money to support them and to see to it that they are administered by competent and faithful men.

Signs of an awakening.—Are there no signs of an awakening? I am glad to say that there are many. Some of the States still seem dead in politics and ignorance, but in others the people are awakening to a realization of the inadequacy of existing schools for the work that belongs to them. The private schools and the city schools have taught the people what might be done. Ministers and professional men, and especially the teachers educated in the colleges and the normal schools, are preaching the gospel of public education, with the result that there is a pervading sense of discontent with the present conditions. It is true that this discontent is still vague; that the discussions of this subject are often unintelligent, and the efforts at improvement crude and ineffective. But the hopeful sign is that the interest of the people has been aroused. Even where they are still under the dark cloud of ignorance we hear subdued mutterings which indicate an early breaking away from the old ways. Some of our State superintendents are striving faithfully to awaken the legislatures to their duty. The reports of Supt. C. H. Mebane, of North Carolina (1896 to 1898), and those of Commissioner G. R. Glenn, of Georgia, and also that of Supt. John J. McMahan, of South Carolina (1899 and 1900), contain forcible statements of facts and eloquent pleas for better schools. Some of our public men are taking up the school question as the chief issue. Hear, for example, these brave words from the inaugural address of the governor

of North Carolina. Speaking of his promise to the people in the campaign, Governor Aycock said:

"I promised the illiterate poor man, bound to a life of toil and struggle and poverty, that life should be brighter for his boy and girl than it had been for him and the partner of his sorrows and joys. I pledged the wealth of the State to the education of his children. Men of wealth, representatives of great corporations, applauded eagerly my declaration. I have found no man who is unwilling to make the State stronger and better by liberal aid to the cause of education. Gentlemen of the general assembly, you will not have aught to fear when you make ample provision for the education of the whole people. Rich and poor alike are bound by promise and necessity to approve your utmost efforts in this direction. The platforms of all the parties declare in favor of a liberal policy toward the education of the masses." And concluding, he says: "The problems before us are of the gravest nature, but among them all there is none that can approach in importance the necessity for making ample provision for the education of the whole people."

The difficulties in the way of improvement.—The difficulties in the way of the improvement of the public schools are that deadening indifference which grows out of ignorance and that pitiful poverty which always accompanies it. The Southern people who commenced thirty years ago by opposing, or at least doubting free public schools, have generally come to recognize their necessity, but they do not yet know how to organize them, nor have they the means to support them. They still need to be educated about the benefits, especially the economic and moral results, of public education.

There are many constitutional and legal difficulties in the way of the organization of anything like a thorough system of public schools in most of the Southern States. As pointed out above, the government and direction of the schools is left in the majority of our States entirely to either the school directors, the county superintendent, or the county supervisors, without any efficient supervision whatever and very little assistance of any kind. Better supervision is absolutely necessary, but unfortunately can not be provided under the constitution of many of the States. For example, it has been decided by the courts in Tennessee that the county superintendent must be elected either by the people of the county or by the magistrates without let or hindrance from any State authority.

In the second place, we leave it to the people of the rural districts and counties to raise nearly all of the school money. In a majority of the States the counties are required to levy a certain per cent upon real and personal property; but where they have very little property the fund produced is exceedingly small. In some cases the people are allowed to make an additional levy if they choose to do so, the total taxes not to exceed a fixed amount. In South Carolina, for example, the constitution authorizes a 3-mill tax on property. But what good does this do where the people have no property? In one district of Aiken County the superintendent tells us the 3-mill tax raised only \$18, and in a district in Dorchester County it produced only \$32, while in a district in Denmark County, a fairly wealthy one, the same tax produced \$1,195. A majority of the States levy no general State tax, or a very small one, for public schools. In Tennessee, for example, the total State fund distributed to the counties for public schools amounted last year to only \$129,000. Such governments excuse themselves from making adequate State levies for the schools on the ground that if the people want the schools they can provide them by local taxation. So it is that we leave ignorance to direct the schools and poverty to tax itself to support them. The States supply neither adequate funds nor direction for the schools. Where education is most needed is just where the people do not appreciate it and will not exert themselves to provide it. It can not be expected that a poor people will tax themselves for schools or that an ignorant people will know how to organize and direct them. We have

yet to learn in the South that the State is the unit of education and must provide for its weakest members. The wealth of the country must educate its poor; the intelligence of the State must direct the schools.

The way to improvement.—Our system of school legislation and management and our methods of school taxation must be completely turned round before we can have anything like a system of efficient public schools. The school money must be raised to a larger extent from the State as a whole and be distributed more in accordance with the needs of the people. School management and supervision must be centralized to a considerable degree in the hands of representative and skilled experts. There should be a State board of education composed of the ablest educational authorities to be found, who should be responsible for all the public schools and should elect a State superintendent who should in turn have the fullest authority with regard to the organization of schools, examination of teachers, courses of study, and the distribution of funds, and have the general direction of county and city superintendents. The schools of the counties and the towns should be in the hands of boards of like powers working under the general direction of the State board and its superintendent. Who would think of carrying on any great business reaching every part of the State by the worthless methods, or no methods, which prevail in the South in regard to our schools? We must have a thoroughgoing reform in these things before we can even begin to build good schools.

What the leaders can do to help.—The immediate need of our people is information and guidance. They need leaders to show them the way. We need a central propaganda or agency which shall conduct a campaign of education for free public education and which, while it edifies the people on this subject, shall use every opportunity to instruct them as to the best forms of legislation for their conditions and the best methods of organization for their schools. This is, then, the definite proposal that I would make to this conference: Shall we not at this meeting take steps to establish such a propaganda for free public schools in the South?

The negro in the schools.—The end of this paper has been reached and I have said nothing about the negro in the schools. We should consider the negro as a man to be educated for work, independence, and citizenship like other men. Everything I have said applies to him, therefore, just as it does to the white man. The negro is in the South to stay—he is a necessity for Southern industries—and the Southern people must educate and so elevate him or he will drag them down. The human race is an organism, all its members being bound together by natural affinities and ministering to each other by natural law. If history, philosophy, and revelation teach us anything it is the solidarity of all mankind, that “no man liveth to himself” and “no man dieth to himself,” but that we are each “his brother’s keeper.”

I plead for justice and common sense in the education of the negro. The most encouraging thing about public education in the South is the noble, self-sacrificing way in which the Southern people have given of their limited resources for the education of their recent slaves. That they will continue to do for the black man all that their means will permit, I firmly believe. These attacks upon the negro school fund, these proposals to give him for his schools only what he pays in himself, come from short-sighted people who fail to recognize the basal principle underlying all public education, namely, the duty of all the people to educate all the people. They do not represent the opinion of the best people of the South and their proposals will not prevail. The people of the South realize already that this proposal is not primarily an assault upon the black man, but a movement to undermine the foundation of the country’s prosperity, progress, and peace. We can not longer take the risks of multitudes of ignorant voters controlled by a few wicked demagogues.

But we must use common sense in the education of the negro. We must recog-

nize in all its relations that momentous fact that the negro is a child race, at least two thousand years behind the Anglo-Saxon in its development, and that like all other races it must work out its own salvation by practicing the industrial arts, and becoming independent and self-supporting. Nothing is more ridiculous than the programme of the good religious people from the North who insist upon teaching Latin, Greek, and philosophy to the negro boys who come to their schools. Many of our Southern States make a similar mistake in trying to enforce in the schools of the black districts courses of study laid down for whites. A Philadelphia lady at work in the South entered her protest recently against requiring the negro children of the sea islands of South Carolina, one of the most backward populations in the South, to study Coleridge and Shakespeare, physiology and hygiene, when they scarcely knew how to read. She reports that in this county, where efficient negro teachers can not be found to teach reading, arithmetic, elementary history, and geography, willing persons are denied license because they can not pass the State examination in "technical grammar" and the "history of South Carolina." She is right. Let us adapt our instruction to the needs of the people, and, above all things, let us give them that industrial training which will prepare them to be self-supporting citizens. General Armstrong, of Hampton, and Principal Washington, of Tuskegee, have worked out a sensible plan for the education of the negro. Our State schools for this race should be modeled after their plan. The only solution of the Southern problem is free public schools for all the people, blacks and whites alike, and compulsory-attendance laws.

TABLE I.—*Progress of twenty-five years of public schools in the South, comprising the States of Delaware, Maryland, the District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Alabama, Mississippi, Louisiana, Texas, Arkansas, and Missouri.*

	1875.	1885.	1895.	1900.	North Central States in 1900.*
Total population	16,143,900	20,458,665	24,371,400	27,076,659	26,262,408
School population (5 to 18 years)	5,342,300	6,828,570	8,297,160	9,214,700	7,692,680
Pupils enrolled in the schools	2,439,843	3,991,233	5,286,696	5,806,598	5,823,019
Per cent of the school population enrolled	45.67	58.45	63.72	63.01	75.68
Average daily attendance	1,521,171	2,554,788	3,389,714	3,732,579	4,066,169
Per cent of enrollment	63.34	64.00	63.77	64.28	69.84
Male teachers	39,215	52,753	56,308	55,765	52,715
Female teachers	20,456	37,416	60,049	71,812	129,201
Whole number of teachers	59,671	90,174	116,357	127,577	181,916
Schoolhouses	49,447	76,361	91,288	96,849	105,118
Value of all school property	\$17,293,023	\$27,884,143	\$56,808,049	\$67,473,856	\$230,391,589
Average value of a school property	\$330	\$365	\$622	\$697	\$2,132
Average number of days school kept in the year	93	93	106	109.6	155.6
Expenditure for superintendents and teachers' salaries	\$10,459,446	\$15,340,916	\$23,195,150	\$26,569,569	\$55,123,025
Average salary of teacher per month	\$41.60	.....	.....	\$31.75 (1899)	\$43.00
Total expenditures	\$13,021,514	\$19,253,874	\$29,372,990	\$36,280,163	\$84,802,319
Expended per capita of population	\$0.81	\$0.94	\$1.21	\$1.34	\$3.23
Expended per pupil in attendance	\$3.56	\$7.54	\$8.72	\$9.72	\$20.85

* Compare "1900" column with that of the North Central States (Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas).

TABLE II.—*Statistics of public schools in 1900.*

	North Carolina.	Georgia.	Alabama.	Compare—	
				Tennessee.	Iowa in 1899.
Total population (census 1900).....	1,893,810	2,216,331	1,828,697	2,020,616	2,231,853
School population (5 to 18 years).....	669,530	786,920	652,930	691,570	633,900
Pupils enrolled in schools.....	400,452	482,673	376,423	485,354	554,992
Per cent of school population enrolled.....	59.8	61.3	57.65	70.1	87.5
Average daily attendance.....	206,918	298,237	207,805	338,566	364,409
Per cent of enrollment.....	51.6	61.8	79.1	69.7	65.6
Male teachers.....	3,650	4,453	1,977	4,960	5,855
Female teachers.....	3,737	5,667	4,601	4,235	22,830
Whole number of teachers.....	7,387	10,120	6,578	9,195	28,684
Schoolhouses.....	6,111	6,306	7,053	7,185	13,836
Value of school property.....	\$1,097,564	\$3,298,552	\$1,500,000	\$3,063,568	\$16,908,076
Average value of a school property.....	\$179.60	\$523.08	\$212.52	\$426.38	\$1,222
Average number of days school kept in the year.....	70.8	112	78.3	96	158
Expenditures for superintendents and teachers' salaries.....	\$761,772	\$1,813,151	\$923,464	\$1,403,848	\$5,417,663
Average salary of teachers per month.....	\$23.36	\$27	\$27.56	\$31.16	\$45
Total expenditures.....	\$931,143	\$1,980,016	\$923,464	\$1,751,047	\$7,978,060
Expended per capita of population.....	\$0.51	\$0.89	\$0.50	\$0.87	\$3.80
Expended per pupil in attendance.....	\$4.34	\$6.64	\$3.10	\$5.17	\$21.89
Average number persons per square mile in 1900.....	30	37.5	35.4	48.4	41
Real and personal property per capita (census 1890).....	\$361	\$464	\$412	\$502	\$1,196

APPENDIX.

THE CONFERENCE FOR EDUCATION IN THE SOUTH.

Fifth meeting (1902), at Athens, Ga.

[The following statement, showing the character and aims of the Southern Conference, is taken from an editorial account of the fifth conference by Hamilton W. Mabie, in *The Outlook* for May 3, 1902.]

The attendance of the delegates was much the largest in the history of the conference, every Southern State being represented, and almost every Southern institution of note and prominence; from the oldest university to the most recently organized public schools.

It was impossible to look into the faces of the delegates, to talk with them, and to hear their addresses, without being impressed by the fact that there has been born in the South a great new movement for education along democratic lines, a propaganda for the uplifting of the masses by the diffusion of educational opportunity in all parts of the country.

The conference was organized only four years ago at Capon Springs in West Virginia, where a number of gentlemen from the North and the South met for informal discussion of Southern educational needs and conditions. The time was auspicious, for scattered throughout the South were able and aspiring men in the colleges, normal schools, and public schools, who felt that the hour had come for a new educational movement, a fresh definition of educational aims, and the union of educational effort for an educational advance along the whole line.

These men were * * * drawn together by a common purpose, and they felt the need of companionship for definiteness of aim, for the encouragement which comes from the consciousness that one is working, not in isolation, but with the sympathy and fellowship of a multitude. It would be impossible to collect a more robust, wholesome, attractive group of men than the Southern teachers who sat in the conference at Athens; men who showed not only the impress of

their training, but, in their responsiveness and the grasp of their hands, that high capacity for enthusiasm which is essential to all great popular movements.

Many of them had come out of great tribulation. They had been working for years in communities in which, by reason of adverse conditions, there was small knowledge of educational matters and still smaller interest in them. They had fought their way alone, slowly explaining their aim and convincing the people with whom they had to deal of the need of new facilities and of a broader idea of the place of the school in a democratic community. In that struggle many of them have become leaders; men like Dr. Alderman; Dr. Dabney, of the University of Tennessee; Dr. McIver, of the Normal College at Greensboro, N. C.; Mr. E. C. Branson, principal of the State Normal School at Athens—to select a little group of representative names from many which ought to be enumerated. These men are not only experts in modern educational methods, but they are familiar with local conditions, with the needs of their communities, and with the measures that must be taken to meet those needs. They have not only been teachers of pupils, but they have been teachers of parents, of legislatures, of officials of the State, and they will become the teachers of the whole section, with a message to the nation at large.

Many topics were discussed at the several sessions of the conference, but every topic was vitally related to the two great objects of the Southern board and of the conference—the awakening of the public interest throughout the South, and the advancement and extension of public-school opportunities, until education is within reach of every boy and girl in the South, without reference to color. The Hon. Hoke Smith struck one of the keynotes of the conference in the title of his address, “Popular education as the primary policy of the South.” Governor Aycock, of North Carolina, one of the most interesting men in the public life of the country, and one of the leaders of the New South, struck another keynote in his very effective plea for a generous support of popular education by the taxpayers; Dr. McIver, of the North Carolina State Normal and Industrial College, one of the leaders of the new movement; Dr. Alderman, President Dabney, the Hon. H. St. G. Tucker, of Virginia; Dr. Albert Shaw, of New York; Professor Farnam, of Yale; Dr. Felix Adler, Mr. William H. Baldwin, jr., of New York; the Hon. H. Hugh Hanna, of Indianapolis, and Mr. Hamilton W. Mabie, were heard at different sessions on different aspects of the single problem of the education of Americans as a national need for the sake of higher citizenship.

It was significant that not a single note of retrogression was heard in any speech, and that all the notes of progress were emphatically applauded. Every Southern speaker dwelt on the necessity of the broadest educational opportunities for both races, and this sentiment never failed to meet with instant response. * * *

The movement which found expression in the sessions of the Southern Educational Conference is national in its character. It has taken hold of the South as nothing has taken hold of it since the war; it is destined, in the judgment of those who have watched it most closely, to become a movement of tidal breadth and depth. It is a movement not only for the betterment of a great section, but for the knitting of closer ties between all sections.

THE SOUTHERN CONFERENCE AND THE BOARDS ASSOCIATED WITH IT.

[Robert C. Ogden, in the *Educational Review*, May, 1902.]

It came about that, by the suggestion of Rev. Dr. Abbott of your city, a conference was formed for the discussion of education in the South. It met for three years at Capon Springs. It was by the kindly invitation of the proprietor of the hotel at Capon Springs that the conference came into existence. But that organization took on a larger life, and last spring met at Winston-Salem, N. C., a place that was better suited for a large assembly. The meetings, lasting through three days, were well attended and enthusiastic. Much was said and done, and in the papers that were presented there was a great deal of valuable information. At that conference I chanced to be the presiding officer, and was directed to form a board for a propaganda of education. That board was formed last winter, and, most happily, there has come together in it a splendid group of men. There is Dr. Alderman, president of Tulane University, at New Orleans. He is a man whom it is fortunate to know, and the portions of the country that do not know him will yet know him, and the country will be richer just in proportion as he is widely known. There are Dr. McIver, who has led the crusade for the education of women in North Carolina, and Dr. Frissell, president of Hampton Institute. These three men are field directors. It is their business to carry on a campaign of education. Our Southern friends say that their people will not read very much, but they will listen to any amount of talk. So we are taking for our motto the exact words of Jefferson in which he says, "Preach a crusade for education." Dr. Dickerman, of New Haven, Dr. Booker Washington, of Alabama, Harry St. George Tucker, of Washington and Lee University, Dr. Frazier, of Richmond, have come into this work, and these men are simply carrying on the propaganda. They will talk by the wayside or will address legislatures. It is said, and I think I am correctly informed, that an address of Dr. Alderman to the legislature of Mississippi—and Mississippi is the most progressive State in Southern education—has resulted in an addition to the appropriation of half a million dollars for the next year. In addition to these men who are in the field comes Dr. Charles W. Dabney, president of the University of Tennessee, who has a liberal appropriation at his command and has, in association with Dr. Claxton and Dr. Eggleston, formed a strong organization for collecting and publishing information of every sort concerning all educational questions between the Potomac and the Rio Grande. That bureau is going on vigorously. The maps that have been prepared, with little signs upon them indicating literacy and illiteracy of both races, are wonderful, where you see at a glance, as an object lesson, just the conditions in each State and each county of each State. And then, too, as consulting engineer or supervising director, there is Dr. J. L. M. Curry. Associated with these men are a few Northern men who stand back of them, and there has been gathered together a fund of \$40,000 a year for two years—\$80,000—which is simply to carry on this campaign of education for education.

Now parallel to this board of the propaganda is a board for money that is composed simply of business men, and perhaps you may have noticed in your papers this morning the first public announcement of that board. It has been formed with an alumnus from Harvard at its head, Mr. W. H. Baldwin, jr., and has already at its beginning something over \$1,000,000 in its hands to expend in following up the work that the preachers of the Southern Education Board may do.

The idea is this: Go into a locality, just as the Slater board, and the Peabody board have done, and get the people to tax themselves. If there is not money enough to build a proper schoolhouse, costing say \$1,000, put \$500 with what the people will raise and build it; then supplement what they will pay for teachers, get better teachers by paying more. Give the people of a locality these facilities

for three years or four years, and when they have had educational advantages for that period then you may withdraw your support; they will take care of it themselves after that. But a million dollars for that purpose! Why, it is a mere trifle. A hundred millions could be used, and a hundred millions will be used before the work is thoroughly done.

It is planned, with the association of these two boards, for the promotion of the idea of education and for the handling of money, to create a community of interest, a clearing house—the work of the Peabody board, the work of the Slater board, the work of the Southern Education Board, and the work of the last board, which is called the board of the General Education Fund—and thus to concentrate the highest intelligence, the result of the best experience, and all economies in such a way as to prevent duplication of this work and to insure the best application of money.

[Walter H. Page,¹ in *The Independent*, May 15, 1902.]

The Athens conference showed two or three facts that are of revolutionary importance.

(1) Northern men who are earnestly engaged in furthering popular education and Southern men who are also actively engaged, as soon as they meet in a friendly earnestness of purpose discover that they agree absolutely, both with regard to aim and with regard to method. They stand on identically the same platform as to the education of the races, and the platform is this—that both races should be treated alike. There is a body of Southern opinion—a decreasing body—that still looks askance at negro education. But the Southern men who are engaged in educational work stand squarely for the same training for the blacks as for the whites. The governors of most of the Southern States—but not quite all—stand firmly on the same platform. This battle has been won once for all.

(2) There was a unanimous agreement that only by a public-school system, generously maintained by taxation, can the problem of rural education in the South be solved, and the conference committed itself to schools that train the hand as well as the mind. Several model schools have been established in rural districts in Georgia where such teaching is done and plans have been made for establishing more. They are enthusiastically approved by the people.

(3) Most important of all, perhaps, was the fostering of what may be called a national feeling in education by such a meeting of men from different sections. The Southern people showed even more than their traditional hospitality to visitors from the North. Anywhere they were taken into their homes, and permanent, intimate friendships came from such associations. Brought into such a relation, what were supposed to be differences of opinion and methods turned out to be agreements. The old clash of purposes and the old suspicions utterly disappeared. The well-informed and earnest North now works in perfect accord with the earnest and enlightened South. Those that find differences and provoke controversies are either not informed or they are not representative of the dominant feeling.

The work of the Southern Education Board and these conferences led to the organization a few months ago of another board which is called the General Education Board. As the Southern board is a clearing house for facts about Southern education and a means of propaganda, so the general board is an organization for practical financial help to education anywhere, but for the present in the South, because help is most needed there. The general board has been incorporated by a special act of Congress. It, too, is made up of both Northern and Southern men, and its chairman is Mr. William H. Baldwin, jr., of New York, and its secretary is Dr. Wallace Buttrick. This board has among its members men who are also

¹ Editor of *The World's Work* and member of the Southern Education Board.

members of the Peabody and Slater and Southern boards. These four bodies, therefore, work together, each taking advantage of the knowledge and experience gained by the others.

The General Education Board has a fund of somewhat more than a million dollars, which it is spending thus far chiefly for the building up of rural schools in the South and for the training of teachers for these schools. The distribution of its money is made through the local machinery for educational administration, with proper safeguards and guaranties that it is rightly applied; and it is given for the furthering of education without regard to sex or color. The board has been so organized and is so managed that its help is not suggestive of charity, for it works in hearty cooperation with the enlightened agencies of Southern education. Its aim is simply to help remove the heavy burden that long past events—for which this generation is in no way responsible—placed on Southern life, and this it regards as the foremost patriotic duty of our time.

The General Education Board hopes to be the channel for the wise distribution of many millions of dollars for this patriotic purpose. It is an organization of business men, who do the work on strict business methods.

CHAPTER XXI.

TEMPERANCE INSTRUCTION.

CONTENTS.—(1) "Is there too much temperance matter in the school physiologies?" by Mary H. Hunt.—(2) Report of a committee of the Department of Superintendence.—(3) "Temperance teaching and recent legislation in Connecticut," by Supt. W. B. Ferguson, of Middletown, Conn.—(4) Temperance instruction in Nebraska.—(5) "The modern subjection of science and education to a propaganda," by Prof. Wm. T. Sedgwick, of the Massachusetts Institute of Technology.—(6) "The will of the people, not of an oligarchy," by Mary H. Hunt.—(7) Alcoholic physiology in school.—(8) Enforced temperance among railway employees.—(9) Report of a committee of the New York State Science Teachers' Association.

IS THERE TOO MUCH TEMPERANCE MATTER IN THE SCHOOL PHYSIOLOGIES?¹

By MARY H. HUNT,

World's and National Superintendent of the Department of Scientific Temperance Instruction of the Women's Christian Temperance Union.

The statement is sometimes made that the indorsed school physiologies give too much space to the temperance matter. If this is true, is there any topic under which the temperance matter can be left out; can all temperance matter be massed in one chapter and omitted from the rest of the book; or can the present space devoted to alcohol and narcotics be condensed? Let us consider these three propositions in turn.

SHALL THE TEMPERANCE MATTER BE LEFT OUT OF ANY TOPIC?

THE BONY FRAMEWORK.

Reputable scientific authorities testify that alcohol and tobacco used during the period of growth tend to dwarf the human stature, or, used later in life, to weaken the recuperative powers of the bony system, thus retarding or even preventing the formation of new bony material in cases of broken or shattered bones. Every child desires a well-formed body. Shall we omit these facts from the books and thus leave the child in the midst of temptations to drink and smoke, unwarned of the natural consequences to his future growth?

THE MUSCULAR SYSTEM AND WORKING ABILITY.

Take the muscular system. It has been proved experimentally in scientific laboratories, and on a large scale with armies and companies of laboring men, that tobacco and alcoholic drinks weaken the strength and endurance of the muscles. But these facts are not universally known. Moreover, the opposite erroneous opinion, that alcoholic drinks strengthen one and better enable him to endure hardships, is very prevalent. Only a few years ago a college professor (Lombard)

¹From the School Physiology Journal, December, 1901.

who was making some experiments on the strength and endurance of the muscles, was greatly surprised to find a remarkable decrease of ability after he began to smoke a cigar. He had previously supposed that he could work better while smoking.¹ Shall we erase these facts from the pages of our school text-books and confine them to the archives of medical libraries, where the people would never find them? It has been stated recently by the dean of one of our industrial colleges, who has been studying the industrial problem both at home and abroad, that one factor in the present commercial supremacy of this country is "the American tendency to apply knowledge as soon as acquired." The indorsed school physiologies are now carrying to millions of children all over this country the facts concerning the effects of alcoholic drinks and tobacco on muscular working ability which have been wrought out by scientific experiment, largely within the past decade, and which, but for this practical application, would be reposing in dust-covered volumes on the shelves of medical libraries. Furthermore, it is the testimony of expert students of the causes of our present industrial leadership that the greater sobriety of the American workman is a very large factor in his greater efficiency over the European workman. The reason for this is seen in the dissemination through the schools, and the immediate application in the industries of the knowledge of the effects of narcotics upon working ability.

Shall we now reverse the policy which has brought such telling results, eliminate these truths from our physiologies, and let the coming American generation grow up uninformed, or misinformed, as chance may decide?

FOOD.

One of the most important chapters in the school physiologies is that devoted to food, which is the source of energy for mental and muscular work. The most perfect engine placed in the hands of an engineer who knew nothing of the nature of fuels would be as little likely to attain the limit of its possibility as the best human machine subjected to an ignorant caterer. The indorsed physiologies teach with the greatest possible exactness the true nature of the materials which men commonly use as foods, and point out definitely and in accordance with the most decisive proofs of exact modern science the qualities that are lacking in certain other substances which have been supposed to be foods, but are not.

"One of the most fatal errors of science," says Professor Kassowitz, of the University of Vienna, "is the idea that alcohol is a food." That idea is common among the people. Step by step for nearly half a century science has slowly but surely divested alcohol of every last claim and every shadow of a claim to a food value.

Recently some who have not kept fully acquainted with this literature have charged falsely that the question is not yet settled, and that therefore the subject should be kept out of the school physiologies. But meanwhile the disproved errors of the earlier experimenters are being promulgated through the newspapers and popular magazines. Shall the evidence which corrects these errors be allowed to lie on the shelves of the medical libraries, or shall it be given to the children, with full references to the authorities, which anyone who doubts may go and consult? As long as human belief influences human action and knowledge decides belief, whoever advocates the withholding of the established facts in this matter from the young is as much a traitor to his country as was Benedict Arnold.

DIGESTION.

Next to the subject of food comes digestion. It has long been held and is still taught by some belated or prejudiced physicians that alcoholic drinks are an aid to digestion. This notion has been disproved by the most careful exact experi-

¹ Journal of Physiology, vol. 13, 1892.

mentation. Shall we leave this evidence out of our physiologies and allow our future generations to become easy victims to the alcohol habit through the popular erroneous notion that it aids digestion?

Following the digestion of food comes its conversion into blood and the transportation of the blood to every part of the organism. The heart is the propelling engine. Medical literature contains constantly accumulating evidence of the injurious influence of tobacco and alcoholic drinks upon the heart. "Tobacco heart" rules many applicants out of the naval and military service of their country and unfits them for many other promising careers. Shall we omit these facts from the school literature and leave our youth to learn from the school of experience, when too late, what they might have been?

RESPIRATORY ORGANS.

Energy for warmth and work is derived from the oxidation or burning of food materials in the tissues. The oxygen necessary for this burning is carried into the body by the respiratory organs. Careful study of tuberculosis of the lungs during the last few years has revealed such a close connection between consumption and alcoholic habits that "alcoholism" and "tuberculosis" frequently stand together in the title of articles in medical literature. Only a few years ago alcohol was advocated by superficial observers in the medical profession as a cure for consumption. It is now a common lay prescription for a cold. Shall the evidence that alcohol predisposes the membranes of the respiratory organs to attacks of cold, makes them more susceptible to the germs of consumption, and weakens the powers of resistance against the disease be withheld from the children who study the school physiologies?

ORGANS OF EXCRETION.

However well the engineer may feed his engine with fuel, if he allows it to become clogged with ashes its power will diminish accordingly. The human body affords a parallel. Alcohol often causes diseases of the kidneys or of other organs concerned in the elimination of waste which quickly derange the human engine. Shall we leave out of our physiologies the evidence science has accumulated in this subject?

THE NERVOUS SYSTEM.

The human nervous system differentiates man from the brute creation, covers the surface of the earth with the products of his constructive power, harnesses the forces of nature to the car of his audacious purposes, and even aspires to think God's thoughts after Him. This, the almost divine part of the human system, the last attainment in the millenniums of evolution, is the most susceptible to the influence of alcoholic drinks and narcotics. Here the evidence of their action in small amounts is first detected by the weakening of that self-control through which man becomes the master of circumstances. Here lies the secret of that power gained by the alcoholic appetite which has caused the fall of some of the noblest specimens of the human race.

The injurious effects of large quantities have long been recognized. They have furnished the text for exhortations to moderation since the days of Noah. But evidence of injurious effects of small quantities, beyond the fact that they tended to the formation of the alcoholic appetite, has been obtained almost entirely during the last ten years. It has been secured through the most exhaustive, exact, and careful observation of the effects of alcohol on the higher mental operations, conducted by trained specialists in the psychological laboratories of renowned universities. Shall the results of these investigations be withheld from the young whose tastes, opinions, and habits are now in process of formation? Shall this knowledge be erased from our school physiologies?

THE ORGANS OF SPECIAL SENSE.

A part of the effects of narcotics upon the nervous system is their effects on the organs of special sense, the media through which the mind is made acquainted with its environment. Shall we withhold knowledge of the fact that these organs may be made less efficient by the use of alcohol and other narcotics?

But there is still another line of truths needed to correct popular misconceptions which encourage the formation of the drink habit.

FERMENTATION.

Fruits are healthful, a necessary part of man's diet. He has a natural appetite for them which has natural limits. Why is not the juice of these fruits when extracted and allowed to ferment equally healthful? To answer this question correctly one must understand the changes that take place during the process of alcoholic fermentation, the natural causes producing them, the nature of the resulting substances—the popular alcoholic drinks. One must know also the nature of the alcohol which makes these liquors injurious to the human system when used as beverages. This knowledge exists in the archives of science. Shall we not, according to our American tendency, continue to give in our school physiologies practical application of this knowledge to one of the most vital questions of individual and social welfare, rather than meekly to forsake our evident duty because some who have given little or no constructive thought to this great problem meet us with the vague objection that we are giving too much space to the temperance matter?

Science, logic, and experience all unite in demonstrating that established facts concerning the nature of alcoholic drinks and other narcotics, together with their effects upon the human system, have a rightful place in all physiologies to be studied by the young, and that, too, in connection with each phase of the subject. To omit such facts from a single topic is by so much to rob the child of knowledge which is his due and which might prove his stay in time of temptation.

SHALL THE TEMPERANCE MATTER BE MASSED IN ONE CHAPTER?

The plea is made that all temperance matter should be massed in one chapter. If we yield to this suggestion we sacrifice logical sequence and often the temperance matter itself. When the child is studying the structure and function of his muscles and his interest and enthusiasm are already kindled at the thought of what he can do with these organs, then is the time to study the hygiene of the same, to learn how the muscles are to be cared for and trained, and what may impair their usefulness. The influence of alcohol and tobacco is thus a logical part of hygiene. There is no sound reason for divorcing them and putting the temperance matter into a separate chapter, where it can be conveniently omitted; but, on the contrary, there is every reason for retaining it in connection with each topic.

Furthermore, if all temperance matter is massed in a single chapter at the end of the book there is every probability that it will be hurried over perfunctorily or neglected altogether. In any case, the golden moment of the child's interest has passed, and it has passed unimproved.

SHALL LESS SPACE BE GIVEN TO THE TEMPERANCE MATTER.

But can not all necessary temperance matter be given in less comparative space? To answer this question one must first compute the amount of physiology that is needed in each successive grade of the school course, and then compute the proportion required for clear statement of the facts of the temperance matter that are

appropriate to the same respective grades. The best efforts of experience, trained skill, and conscientious scruple concerning the omission of necessary truths have found that about one-fifth of the text of the systematically arranged and carefully graded school physiology is required for such a presentation of this topic.

Greater condensation would sacrifice the illustrations and development that are necessary to clear understanding and forcible impression. In such case the teaching becomes dogmatic assertion instead of the logical presentation of reasons for the truth asserted. Such a systematic arrangement as is followed in the indorsed books avoids the wearisome and unwarranted repetition of a few truths and the omission of others which result from unsystematic, haphazard teaching, the kind of teaching which necessarily brings the subject into disrepute wherever it is practiced.

The conservative study of the sociological side of the alcohol question has found the beverage use of alcoholic drinks a first cause in the 31 per cent of the crime represented in prisons and reformatories, excluding all minor penal institutions and criminal courts; a direct cause of 37 per cent of the poverty found in almshouses, excluding the incalculable amount of poverty which escapes these institutions, and a direct cause of 46 per cent of the deserted children. Such facts speak for themselves and show that, in view of the far-reaching effects of the use of alcoholic drinks and other narcotics, one-fifth of the space in our school physiologies is not too much to devote to the subject.

In the face of these facts we dare not lower our standard by omitting or further condensing the temperance matter in the text-books. To do so would be to pave the way for many a child to join the ranks of drink victims and to shut out the strength of his young manhood from the support of his country and her institutions.

REPORT OF A COMMITTEE OF THE DEPARTMENT OF SUPERINTENDENCE.

[At the meeting of the department of superintendence of the National Educational Association held at Chicago February 28, 1901, District Superintendent A. G. Lane, Chicago, chairman of the committee on physiology in schools appointed at the meeting of the department in 1900, presented the following report.]

The undersigned committee of the department of superintendence was appointed under the following resolution:

Resolved, That the chair appoint a committee of seven, whose duty it shall be to report upon the teaching of physiology in the schools, especially with regard to the condition and progress of scientific inquiry as to the action of alcohol upon the human system, and to recommend what action, if any, by this department is justified by the results of these inquiries.

Your committee recommends the adoption of the following report:

The department of superintendence agrees cordially with the special advocates of the temperance cause in holding that everything which public instruction can do in the battle against intemperance ought to be done, and that both physiology and hygiene should be so taught as to leave in the minds of children and youth an adequate and proper knowledge of the effects of alcoholic drinks and stimulants and of narcotics on the human system.

Since the last meeting of this department there has been considerable discussion of the question as to whether alcohol under any conditions is properly to be defined as an article of food. Medical authorities are quoted in support of both sides of this question; but no authority has been found to maintain that alcohol is a food in the ordinary sense of that term. The question of the supposed food value of alcohol is a technical one for medical experts to determine, and not one which

need concern the men and women who are engaged in the work of public instruction of children and youth. For them it is enough to know that its use as a beverage is injurious, and that all authorities agree in deprecating the formation of the drinking habit and in commending all practicable efforts, through public instruction, to promote the cause of temperance.

The questions of highest importance for teachers and superintendents of schools to consider are those which relate to the methods by which temperance instruction shall be imparted, the extent to which it shall be carried, and the subject-matter to be presented.

The educational side of this subject is vitally important and demands thorough and systematic study.

We therefore recommend that a body of educational doctrine be formulated which may guide temperance instruction in the schools throughout the country, and we further recommend that the scope of the investigation be so enlarged as to cover not only the topics already suggested, but also the whole field of personal hygiene, so far as this is a practicable matter for school instruction.

We also recommend that this investigation be conducted under the direction of the National Council of Education, in accordance with the regulations of the National Educational Association.

ALBERT G. LANE.

O. T. CORSON.

F. LOUIS SOLDAN.

E. O. LYTE.

EDWIN P. SEAVER.

JAMES H. VAN SICKLE.

EDWIN A. ALDERMAN.

Upon motion of Mr. Lane, seconded by Henry Sabin, of Iowa, the report was adopted without debate.

TEMPERANCE TEACHING AND RECENT LEGISLATION IN CONNECTICUT.¹

BY W. B. FERGUSON,

Superintendent of Schools, Middletown, Conn.

The act of the Connecticut legislature, at its last session, in radically modifying the temperance education law of the State, at the request of the teachers and temperance leaders, probably marked the beginning of a reaction in legislation affecting one of the most remarkable temperance movements of modern times.

The Connecticut statute of 1893 resembled, in its general features, the statutes of several other States. It was less stringent than the law of New York, Illinois, or New Jersey, but more exacting than that of Massachusetts or Pennsylvania. It was as follows:

SECTION 1. The nature of alcoholic drinks and narcotics, and special instruction as to their effects upon the human system, in connection with the several divisions of the subject of physiology and hygiene, shall be included in the branches of study taught in the common or public schools, and shall be studied and taught as other like required branches, by the use of graded text-books in the hands of pupils where other branches are thus studied, and orally in the case of pupils unable to read, and by all pupils in all schools supported wholly or in part by public money.

SEC. 2. The text-books used for the instruction required by the preceding section for intermediate and primary pupils shall give at least one-fifth of their space

¹ Reprinted from the Educational Review, March, 1902.

to the consideration of the nature and effects of alcoholic drinks and narcotics, and the books used in the highest grade of graded schools shall contain at least twenty pages of matter relating to this subject; but when this subject is massed wholly or in part in a chapter or chapters at the end of a book, such book shall not be considered as meeting the requirements of this law.

SEC. 3. It shall be the duty of all school visitors to report to the comptroller if the provisions of this act have not been complied with, as specified in the preceding sections; and any failure thus reported, or otherwise satisfactorily proven, shall be deemed sufficient cause for withholding the amount of school dividend which such district or districts are otherwise entitled to receive.

SEC. 4. No certificate shall hereafter be granted to any person to teach in the public schools of Connecticut who has not passed a satisfactory examination in physiology and hygiene, with special reference to the effects and nature of alcoholic drinks and other narcotics upon the human system.

This statute had been in force eight years. In some schools an honest and earnest effort had been made to obey both its letter and spirit. In other schools temperance teaching had doubtless been slighted, but everywhere throughout the State superintendents, principals, and teachers were, at the beginning of the present year, practically unanimous in condemning certain provisions of the law and in demanding their repeal.

Before entering upon a discussion of the recent legislation in Connecticut, let us trace briefly this remarkable temperance movement from its beginning. What were its cause and origin? What are its aims, methods, and results? * * *

Alexander von Humboldt declared in the last century that whatever virtue men would have appear in society must be taught in the schools. An organization of women was to apply that philosophy to the temperance problem. The Woman's Christian Temperance Union was organized in 1874. Its plan was to form State, county, and local branches throughout the country, and its membership soon extended into every State and Territory of the Union. In 1879 a prominent member of that organization submitted to it a proposition, which she called "my concern." It provided for "a thorough, systematic study of scientific or physiological temperance for all pupils in the public schools of the United States." In 1880 a department of scientific temperance instruction was organized to put that plan into execution, and a superintendent was appointed "to originate, devise, and direct plans of work for the accomplishment of the objects of the department." This superintendent had, she herself says, "an earnest, enthusiastic clientele of active, loyal Christian women in every part of the country, ready quickly and intelligently to carry out the plans transmitted to them, a great army of battalions in every State and Territory, regiments and companies with pickets at every outpost, and all under the guidance of one head."

The hope entertained by the members of this organization of effecting a thorough temperance reform in society by teaching the children the effects of alcohol on the human body rests upon the old Socratic philosophy that knowledge of evil insures the avoidance of evil; that people do wrong from ignorance only. It was said,¹ "The cause of temperance will ever be a fluctuating reform until it is based upon the education of the people as to the proven facts about the nature and consequent effects of alcoholic drinks. When these facts become a part of public knowledge, dating from early childhood, the saloon problem will be solved."

This instruction was to be given in connection with physiology and hygiene, but temperance was to be made the "chief topic." It was proclaimed, "This is not a physiological but a temperance movement."¹ This teaching was also to be required by law, not only in the schools of every State, but in all schools and colleges under the control of the National Government.

Many things contributed to make legislation to this end possible. The object was a noble one, and history has repeatedly shown that the nobility of the object

¹ An Epoch of the Nineteenth Century, by Mary H. Hunt.

often blinds good people to the futility, if not to the immorality, of the means. Again, all attempts to reform adult society had failed, and the only hope of redeeming the world from the curse of strong drink seemed to be in saving the children from intemperance by a process of education. Still again, the Woman's Christian Temperance Union, with its loyal branches in every city, town, and village, with its leader of high moral purpose and consecration to a good cause, of consummate ability as a general, and of great eloquence as an advocate, was able to wield a political influence second to few, if any, organizations in the country.

Let us briefly notice the means used by that organization to secure desired legislation. It will be a study of the most astute and successful political methods. Regarding the campaign in New York, in 1884, for a temperance educational law, the leader in that campaign says: "The campaign was systematically planned and executed. Earnest appeals from platform, press, and prayer meeting among the constituencies back of every vote created a sentiment that echoed in the final 'aye,' 'aye,' that enacted the law of 1884. * * * More than a million pages of matter in print and letter form went out during that campaign to the people of that State."¹ According to the same authority similar methods were employed in Pennsylvania in 1885. * * *

The people were appealed to in the name of temperance; their sons and daughters were in danger of suffering; why not fortify them against temptation by pointing out to them the true nature of alcohol and tobacco, and thus enable them to withstand in the evil hour? A strong public sentiment having been thus created in each locality "was gathered up and focalized on each member of the committee to whom the bill would be referred in both branches of Congress" and the legislatures, and, before the vote was taken on the final passage of the bill, Senators and Representatives were deluged with letters and petitions. Presumably, some hesitated to oppose such temperance measures lest they be classed among the friends of the saloon, the enemies of the children and good morals, and be threatened with political annihilation. It is not surprising, therefore, that a temperance education law, usually of a mild nature, was soon passed by nearly every State and by the National Congress.

But, as has been said, temperance was to be taught in connection with physiology and hygiene, and there were no text-books of physiology which devoted much space to alcohol and other narcotics. The next step, therefore, was to induce or compel publishers to revise their physiologies and to incorporate in them chapters on narcotics.

It was just here that these temperance leaders made their first great mistake. Only praise can be bestowed upon their ultimate object. It is a truly noble and patriotic one. Nor can severe criticism be pronounced upon the means employed to secure legislation. They were simply the means often used by the better class of politicians. But, in revising the physiologies, the greatest care should have been exercised not to include in them any statements concerning alcohol and other narcotics which do not square with scientific truth. These books, however, instead of being scientifically accurate, contain statements that contradict both science and the everyday observations of men. True, they are said by those who are styled "eminent scientists," "best scientific authorities," and the "world's experts," to contain "no errors," to be "substantially correct," "completely in accordance with the facts determined through scientific experimentation and observation," "accurate," etc. But let us briefly examine some of these volumes and ascertain whether they are wholly accurate and, therefore, in accord with the highest scientific authority.

In the latest and quite recent editions of these books we find the following state-

¹An Epoch of the Nineteenth Century.

ments, made either by the authors of the books or quoted from those who are called "eminent writers," "gifted authors," and "men of high standing and acknowledged ability."

"The majority of beer drinkers die from dropsy."¹

That the long-continued and excessive use of beer tends to affect injuriously the liver and kidneys—and all organs of the body for that matter—is undoubtedly true, but if it be true that the majority of those who drink beer die from dropsy, it is difficult to understand why American life-insurance companies are so desirous of doing business among such a dropsical people as the Germans must be.

"Alcohol is a virulent poison, and should be classed with arsenic and mercury."²

Druggists do not seem to know this, for they never put the "poison" label on a bottle of alcohol, though they seldom forget to do so in the case of arsenic and mercury. Instead of being a "virulent" or "powerful" poison, alcohol is one of the weakest and slowest of poisons. Moreover, it is a subject of discussion among leading scientists whether alcohol acts at all like a poison when taken in small doses. But whether it should or should not be classed scientifically as a poison, certainly in the sense in which the child understands the word "poison" alcohol is not a poison, and this is sufficient reason why it should not be so called in teaching children.

Another³ of these "indorsed" physiologies conveys the impression that alcohol passes through the different organs of the body unoxidized and merely "mixed with" the blood, thus conveying the impression that it can not in any sense or measure serve the purpose of a food. This is a surprising position for a book published in 1899 to take, in view of the results of scientific research conducted in the laboratories of Europe and America during the last twenty years, but more especially during the last three or four years. Alcohol is certainly not a food in the sense in which children understand that term, and this consideration forbids calling it a food in teaching children, but to affirm specifically or to teach by implication that alcohol is not oxidized in the body, but always passes through it unchanged, is to teach untruth.

Alcohol can not build tissue nor increase muscular strength, but taken in small quantities it is oxidized and yields energy. This fact, however, furnishes no good reason for using alcohol liquor as a beverage, nor does it help to solve any one of the many problems that have their source in the liquor traffic.

The subject of alcohol as a food or poison is a purely academic one, and should have no place in the teaching of the public schools, at least in the lower grades.

"Tobacco has done more to cause insanity than spirituous liquors."⁴

The records of the Connecticut Hospital for the Insane show 1,003 cases of insanity caused by spirituous liquors and only 13 cases caused in part by tobacco.

"Tobacco is doing more harm in the world than rum."⁵

This statement was taken from a newspaper report of an address by Dr. Willard Parker. Those who knew Dr. Parker can best judge as to whether he would be guilty of making such a ridiculous statement. But is that the kind of temperance teaching we want our boys to receive? Would not the inference that it is less harmful to drink beer or whisky than to smoke or chew tobacco be natural to boys who are told that "tobacco is doing more harm in the world than rum?"

Dr. J. W. Seaver, of Yale University, is made to say, "No young man can use tobacco without injuring himself *seriously*."⁶ (The italics are mine.) In reply to a letter from me Dr. Seaver says: "I would never think of making such a state-

¹ Smith-Willard Standard School Physiology, p. 157.

² Oral Lesson Book, New Century Series, p. 56.

³ Baldwin's Advanced Lessons in Physiology, pp. 227-228.

⁴ Stowell's Essentials of Health, 1896 edition, p. 242.

⁵ Pathfinder, No. 2, p. 60.

⁶ Stowell's Essentials of Health, p. 233.

ment; the facts are all against such a statement. * * * It is a bugaboo." And yet Dr. Seaver is one of the strongest advocates of total abstinence from tobacco. The author of the book is said to have recently acknowledged that he took the statement from a newspaper.

"None are more likely to deceive unscrupulously than those who use the weed. Tobacco demoralizes; it makes a man careless about his hair; he lets his nails go unclean; his clothes are soiled, and he is generally untidy."¹

These are merely illustrations of the kind of temperance instruction which too many of these books offer to the boys and girls in our public schools.

Of course these books were not satisfactory to teachers, who knew that such statements were in direct conflict with the results of their own observations and who soon learned from scientists that such teaching was also in direct conflict with the consensus of scientific opinion. Indeed, nothing in the education of our time has met with so general and so earnest disapproval from the most intelligent teachers as have these "indorsed" physiologies. This has been due, however, not so much to specific statements of a misleading nature as to the spirit of exaggeration that pervades the books, to the large amount and unwise distribution of the temperance matter, to the emphasis placed upon facts—or assumed facts—that appeal to fear and to the disregard of facts that appeal to manliness and the moral nature, to negative teaching chiefly, and to the omission of much that should be given to emphasize the beauty, nobility, and strength of a temperate life.

Let us briefly notice the proportion of space which these "indorsed" books give to narcotics. One of them,² which contains approximately 90 pages (not including preface, contents, index, or space occupied by cuts and questions on the text), devotes 38 pages to anatomy and physiology, about 35 pages to narcotics, and only 17 pages to all other topics of hygiene. It devotes 1 page to the "Care of the brain and nerves," but 4 pages to the effects of narcotics on the nervous system; 4 pages to the important subject of "Foods," but 16 pages to the sources and nature of alcohol; 7 lines to show why people who are not growing need food, but an indefinite number of pages to show why these same people do not need alcohol. Five lines are thought sufficient for a thorough discussion of the important subject of "Exercise," but nearly three pages are devoted to a consideration of "Cider." Another volume of this series³ devotes approximately 75 pages, or two-fifths of the entire space (not including space occupied by cuts and questions), to narcotics. These books, I think, represent about the proportion of space given by other "indorsed" physiologies of the same grade to narcotics.

This proportion is much too great. Too much of even the best food soon cloy the appetite, causes indigestion and nausea, and does physical harm. So too large or too frequent doses of temperance instruction are sure to kill all interest in the subject, cause disgust, and do moral injury. Moreover, all the facts that are presented in the 35 pages of the one book or the 75 pages of the other could be adequately and impressively presented in 10 pages or even less.

As has already been shown, these books appeal chiefly to fear. The trembling hand, the thick speech, the dull senses, the poisoned blood, the overwrought heart, the disordered liver and stomach, the weakened nerves, the confused brain, the foul mouth, the offensive breath, the poverty, crime, and misery of the drunkard are hysterically held up to the gaze of the children; but the steady hand, the distinct speech, the quick senses, the healthy body, the clear brain, the success, and happiness of the temperate man are scarcely mentioned.

Says Prof. S. T. Dutton, of Columbia University: "We do not teach hygiene by the study of disease, cleanliness by the observation of filth, nor purity by the contemplation of vice."

We teach truth, kindness, generosity by pointing to men and women who

¹ Stowell's Essentials of Health, p. 245.

² Pathfinder, No. 1.

³ Pathfinder, No. 2.

exemplify those virtues. "It is by studying the Christ-life that we become Christ-like," says a Connecticut school superintendent, a member of the Women's Christian Temperance Union. "Too often we try to lead the children into temperate lives by holding up intemperance only, into lives of all self-control by careful observation of those who are only examples of self-indulgence. We believe that these lessons can be most effectively taught by persistently placing before the child, in every way and at every opportunity, the virtues we would have him incorporate into his own life."

"Education," says Superintendent Soldan, "is that process by which the germs of good that lie as possibilities in every child are drawn forth and developed." How can that object be better accomplished than by keeping the thoughts and affections on the good, the pure, the beautiful, and away from the evil, the impure, and the ugly? Froebel's injunction was so "to fill the mind with the beautiful that there will be no room for the ugly." Our ministers learned long ago that Christian character can be more easily cultivated by helping people to catch glimpses of heaven than by holding up to their gaze the torments of hell. If this be true in the case of older people, it is doubly true in the case of children.

We do not contend that the evil effects of alcohol and tobacco should never be pointed out to children. They should be, but chiefly in order that by contrast the nobility, strength, and success of the temperate life may be made more impressive.

The distribution of the temperance matter in these books is very objectionable. Instead of concentrating it into three or four chapters, it is distributed in many places, and, in too many cases, the trend of the chapter is toward a climax in the discussion of narcotics; that is, the instruction in physiology and hygiene seems to be intended merely as a preparation for the temperance teaching that frequently closes the chapter. In this way temperance is made the "chief topic," and the proclamation that "This is not a physiological, but a temperance movement" is enforced.

But to return to the history of this temperance movement. After physiologies of the nature just described had been secured, a demand was made for more stringent laws—laws which required the use of text-books that devote at least one-fifth of their space to narcotics, and which specified that temperance instruction should be given to all children, from the lowest primary classes to the young men and women in the high school.

It is not generally understood, I think, with what consummate shrewdness and skill the political influence of the Woman's Christian Temperance Union on legislators and the personal influence of officers and members of that organization on publishers and school committees have been made to contribute to the accomplishment of the one purpose, viz, the adoption and use of the "indorsed" physiologies. By plans carefully laid and skillfully executed, this object was, in some States, quickly secured. Through the personal influence of branches of the Woman's Christian Temperance Union in each locality public sentiment was first aroused in favor of temperance instruction. This sentiment was then brought to bear upon legislators in favor of temperance education laws, at first of a liberal character. Publishers were then compelled to revise their books and to incorporate in them chapters on narcotics in order to secure sales, for the influence of the local Woman's Christian Temperance Union forced school committees to demand temperance books. It was, then, not a difficult matter to secure such modifications in the law as practically to require the use of the "indorsed" books or of books made with a view of securing indorsement, and therefore differing little from the "approved" books.

No claim is here made that, in the steps taken to secure this legislation, methods of a dishonest character were employed. There is admiration rather for the perfect organization of forces, for the marshaling of "companies, battalions, pickets, and outposts," for the carefully laid and skillfully executed plans, for the facility

with which legislators were made as clay in the hands of the potter, and for the triumphant success that crowned the efforts of those who fought without a ballot. I am simply endeavoring to show how it has happened that laws which do violence to modern pedagogy, which force upon the schools "devitalized and machine-like methods," and a kind of teaching which is a "travesty on modern education," have been secured by the Woman's Christian Temperance Union in spite of the opposition of teachers and school superintendents, in spite of State officers of education, college professors, and college presidents, in spite of prominent physicians, clergymen, the public press, and even the legislators themselves.

In demanding these more stringent laws, however, the temperance people made their second great mistake. Had school superintendents, principals, or teachers been consulted and their advice followed, such laws would not have been demanded. There are many reasons, well understood by practical school people, why the smallest children should not receive instruction concerning the effects of narcotics on the human body. Moreover, that stringent laws do not insure effective teaching, but that liberal laws are more likely to accomplish that object, is clearly shown by the results in different States. The experience in Pennsylvania is to the point. The teaching in that State is said by temperance leaders to be especially satisfactory, and yet the law of that State specifies nothing as to what, how much, or how temperance shall be taught, nor is it specified that text-books shall be used in any grade.

Let us now return to the situation in Connecticut.

What had been the results of temperance teaching under the exacting statute of 1893? The following replies of the ten teachers in one of the grammar schools of the State undoubtedly represent the opinions of teachers throughout the Commonwealth. The questions were submitted before the movement to secure modifications in the law was begun, and only one teacher knew the superintendent's opinion of the text-books in use or of the results of temperance teaching in his schools.

"Do your children understand what the text-book states about the physiological effects of alcohol on the liver, kidneys, heart, and other organs of the body?" All answer "No."

"Do you accept as true all the statements of your text-book of physiology?" All answer "No."

"Do you think that temperance instruction, as presented in your book, will save some of your boys from the use of intoxicating liquors and other narcotics?" Four answer "Possibly," six answer "No."

"Do you think that temperance instruction should relate chiefly to the effects of alcohol and other narcotics on the human body, or to their effects on character, happiness, and success in life?" All answer "The latter."

All of these ten teachers had earnestly endeavored to obey both the letter and the spirit of the law. Can it be reasonably doubted that similar replies would be made to these questions by the teachers of New York, Illinois, and other States, upon whose schools a kind of temperance instruction is forced which is baneful to both teacher and pupil?

And so this temperance education law had been tried in Connecticut eight years with results that were unsatisfactory to both teachers and temperance leaders, when, suddenly, the widespread opposition to the law that had been gathering force among the educators became manifest and made itself felt in favor of radical modifications.

At a meeting of the Connecticut council of education, held in New Haven early in the present year, the subject of "Temperance Teaching in Public Schools" was discussed by Prof. W. O. Atwater, members of the council, and officers of temperance organizations of the State, who had been invited to be present and to take part in the discussion. So great was the opposition manifested by the school superintendents and principals to the law that the Rev. J. H. James, secretary of

the Connecticut Temperance Union, suggested that the school people and temperance people get together and see if they could not agree upon modifications of the statutes if modifications should seem desirable. The suggestion was acted upon, and a committee was appointed to confer with the officers of the temperance organizations of the State. A conference was held; a bill was at length agreed upon and accepted by the school people and temperance people. Superintendents and principals, representing a majority of the teachers and pupils of the State, signed a petition to the legislature urging its passage. Every superintendent, principal, and teacher in the State, so far as I know, favored the bill. It was indorsed by President Hadley, of Yale; President Raymond, of Wesleyan, and other prominent citizens of the State. It was strongly opposed by the national superintendent of scientific temperance instruction and members of her advisory board, but it passed both house and senate without a word of opposition. * * *

Great honor is due the temperance people of Connecticut, especially the Woman's Christian Temperance Union, for manifesting a broad-mindedness and a spirit of conciliation which made agreement with the teachers possible. They placed duty before policy, good teaching before any desire for a "perfect" law, and the interests of the children before the fear or pleasure of anybody. The future will show, we believe, that in winning the respect and confidence of the teachers by uniting with them in support of a more reasonable temperance education law they "built better than they knew."

The provisions of the new law are as follows:

SECTION 1. The effects of alcohol and narcotics on health, and especially on character, shall be taught in connection with hygiene as a regular branch of study to all pupils above the third grade in all graded public schools except public high schools.

SEC. 2. Suitable text-books of physiology and hygiene, which explain the effects of alcohol and narcotics on the human system, shall be used in grades above the fifth in all graded public schools except public high schools.

SEC. 3. The provisions of sections 1 and 2 of this act shall apply, in ungraded public schools, to classes corresponding to the grades designated in said sections.

SEC. 4. All normal schools and teachers' training schools shall give instruction in the subjects prescribed in sections 1 and 2 of this act and in the best methods of teaching such subjects.

SEC. 5. No certificate to teach in grades above the third shall be granted to any person who has not passed a satisfactory examination in the subjects prescribed in section 1 of this act.

SEC. 6. If it shall be satisfactorily proven to the comptroller that any town or district, having pupils above the third grade, has failed to meet the requirements of this act, such failure shall be deemed sufficient cause for withholding, in whole or in part, school dividends which such town or district would otherwise be entitled to receive.

If this statute be compared with that of 1893, the following chief differences will appear: The present law does not require temperance instruction below the fourth grade nor in the high school; it does not require the use of text-books below the sixth grade nor the use in any grade of books that devote any definite portion of space to narcotics. Neither does it require the use of text-books by pupils. All these requirements were definitely specified in the statute of 1893. The increased demand on the normal schools is more apparent than real, for the old statute required those schools to provide temperance instruction by its general provisions relating to the teaching of temperance "in all schools supported wholly or in part by public money."

The present statute was a compromise in the strictest sense of the word. It was not entirely satisfactory to either party, but it was more satisfactory to the teachers than the old law, and to the temperance people than no law at all. A fight between the teachers and the temperance people might have resulted in the passage of the bill which had been introduced early in the session, and which provided for the repeal of the then existing statute, but neither party desired to enter upon such a fierce contest as would surely follow.

The teachers of Connecticut are in favor of giving to their pupils a reasonable amount of temperance instruction, but they wish to practice temperance in their temperance teaching. They believe, with the National Association of Superintendence, that "the question of highest interest for teachers and superintendents of schools to consider is the methods by which temperance instruction shall be imparted, the extent to which it shall be carried, and the subject-matter to be presented." They believe that all these matters should be determined by practical educators and not by visionary enthusiasts. They know that many a course of study, conceived in the fertile brain of one of no experience in teaching, has found its Waterloo in the practical test of the school-room.

But what is to be the outcome of this temperance movement?

The answer to that question depends largely upon the wisdom shown by educators and temperance leaders. If they act as becomes those who seek the same ultimate object, some good should result; but these temperance people are doomed to certain disappointment in the amount of good which they hope will be accomplished. Their theory and hopes rest upon an assumption that is not founded on the truth. Knowledge of evil does not insure the avoidance of evil. People do not do wrong from ignorance only.

Educators and temperance leaders should cooperate, and cooperation will be promoted if good sense, consideration, and forbearance are shown by both parties.

Educators should remember that they are public servants and are not in a position to dictate in matters of public policy; that more can be gained by patience and discussion than by impatience and unkind remarks; that the temperance people who have been instrumental in securing existing legislation are honest, high-minded, true to their convictions of duty, desiring only to subserve the highest interests of the children, of society, and their country; that they can not be driven from their course, but that the great majority of them can be led from it by showing them a better way; and that, when aroused by a sense of duty, they can wield a political influence which educators would find difficult to overcome.

On the other hand, temperance leaders should remember that most teachers are also temperance people by precept and example; that they are honest, high-minded, and conscientious; that they are second only to parents in the interest they feel in the moral welfare of their pupils; that they have had professional training and know best what subjects are suited to the different stages of mental and moral development; that teachers can not be forced to teach what they believe to be false; that the most intelligent teachers will rely for their scientific facts upon men of science and not upon the compiler, the tyro, or the partisan; that no temperance education law, however "perfect," can accomplish much unless it has the support of educators; that their support can not be secured by abuse, by charging them with being in sympathy with the liquor interests and always opposed to progress; that no temperance education law or course of temperance instruction which is conceived in the brain of anyone, however brilliant, who has had no educational training or experience in the modern schoolroom will probably be sufficiently sane and sensible to deserve the support of anybody. And, furthermore, temperance leaders will do well to understand that the people are beginning to know the facts about this temperance movement, to question its efficacy as at present conducted, and that, in a contest between teachers and the promulgators of this movement, the people will support the teachers as they have never done before.

Liberty to teach the truth, as the teacher understands it, and to teach it in the way in which he can make it most effective, must be maintained at all cost. For educators to yield this right would be to sacrifice self-respect and the highest interests of the children. All who are interested in sound education and good morals should see to it that this right is preserved to the teachers of American youth.

TEMPERANCE INSTRUCTION IN NEBRASKA.

The instruction in this subject is often unwisely distributed throughout the course, and any change of sentiment or opinion against the use of alcohol seems entirely disproportionate to the outlay of time and effort that has been made. There is frequent and unnecessary repetition, and diminished interest and dislike of the subject are prevalent. Text-book instruction could, with profit to the cause and to the school, be limited to the higher grammar grades. The use of charts in common schools showing morbid physiological conditions is generally condemned.—*Official decisions of the State superintendent of Nebraska (1881-1902)*, p. 46.

 THE MODERN SUBJECTION OF SCIENCE AND EDUCATION TO PROPAGANDA.¹

When, in 1842, Horace Mann published his still excellent essay on *The Study of Physiology in Schools*, he seems, judged by recent school statutes of the several United States, to have made one serious omission, for he nowhere mentions or even foreshadows that remarkable creation of our own times, "temperance physiology," and very likely, with some old-fashioned people of to-day, he regarded "temperance" as chiefly a moral question.

The movement is variously called "scientific temperance instruction," "temperance physiology" or "physiological temperance," and it has now grown to such proportions and has gained such power as to dominate, almost absolutely, all instruction in elementary physiology and hygiene in America. It is of course right and proper that pupils in all grades of the public schools should be taught the dangers of alcoholic beverages as fully and as earnestly as other dangers lurking in food or drink. We may even grant that more stress should be laid upon this subject than upon some others. But an examination of the present status of elementary education in physiology and hygiene in the United States shows that in many cases the instruction demanded by this propaganda, and given according to law, in reference to alcohol goes much further. It even appears that all instruction in physiology and hygiene in the public schools has passed to a great and unjustifiable extent into the virtual control and under the subjection of the "temperance physiology" propaganda.

Authoritative sources of information for testing these statements are easily accessible to all. They consist of the statutes of the several States requiring instruction, often of prescribed and peculiar kinds, regarding alcohol; of the text-books on elementary physiology and hygiene actually in the hands of the pupils; of the teachers—many of whom groan in spirit even when they do not dare to complain openly; and last, but not least, of the histories of the propaganda published, one in 1891 (or earlier) and the other in 1897.²

From these latter it appears that statutes now exist in nearly every one of the United States requiring instruction in physiology and hygiene with special refer-

¹ Abridgment of an address delivered at the Chicago meeting of the American Society of Naturalists, December 30, 1901, by Prof. Wm. T. Sedgwick, of the Massachusetts Institute of Technology, president of the society.

² 1. *A History of the First Decade of the Department of Scientific Instruction in Schools and Colleges of the Woman's Christian Temperance Union*. By Mary E. Hunt, superintendent for the United States and the World's Woman's Christian Temperance Union. Second Edition. Boston, 1891.

2. *An Epoch of the Nineteenth Century. An Outline of the Work for Scientific Temperance Education in the Public Schools of the United States*. By Mary H. Hunt, national and international superintendent of the department of scientific temperance instruction, and life director of the National Educational Association. Boston, 1897.

ence to the nature and effects of alcoholic drinks; that in some States a penalty clause is attached for nonenforcement; that in some the amount of space to be given in text-books is prescribed, and in the same or in others the time to be devoted to the subject. In some States it is also required that the subject shall not be treated in an appendix or in a separate chapter at the end of the book.

The Illinois law requires that all pupils "below the second year of the high school and above the third year of school work," counting from the lowest primary, "shall be taught and shall study this subject every year, from suitable text-books in the hands of all pupils, for not less than four lessons a week, for ten or more weeks of each year." For students below the high school "such text-books shall give at least one-fifth their space," and for high-school students "not less than twenty pages, to the nature and effects of alcoholic drinks and other narcotics. The pages on this subject in a separate chapter at the end of the book shall not be counted in determining the minimum." The New York law of 1896 is very lengthy and likewise contains an important provision that "this subject must be treated in the text-books in connection with the various divisions of physiology and hygiene, and pages on this subject in a separate chapter at the end of the book shall not be counted in determining the minimum."

The effect of these peculiar laws closely defining instruction in physiology and hygiene has been to create a correspondingly peculiar class of text-books. Some of these have been prepared by competent writers, but most of them are inferior and some are distinctly bad. One chapter in Mrs. Hunt's history is entitled *The Text-Book War*. It is not agreeable reading, either for scientific men or for educators. In a so-called *Great Petition to Publishers*, which reads more like a threat than a petition, it is stated: "This is not a physiological, but a temperance, movement. In all grades below the high school this instruction should contain only physiology enough to make the hygiene of temperance and other laws of health intelligible. Temperance should be the chief and not the subordinate topic, and should occupy at least one-fourth the space in text-books for these grades." In the same *Great Petition to Publishers* we find it also stated that "Those text-books that are largely physiology with a minimum of temperance matter * * * do not meet the requirements of the law, and do not satisfy those who secured its enactment and are determined to secure its enforcement." Further on, publishers are told exactly what is wanted in great detail and in no uncertain tones.

Text-books conforming with these requirements of the propaganda may be officially "indorsed" by a "committee of the advisory board" sitting in council for the purpose. In another chapter, entitled *The Text-Book War Over*, it is stated that "in response to the *Great Petition* most of the publishers have expressed the desire to have their books revised, on condition that the national superintendent of the scientific department of the *Woman's Christian Temperance Union* would revise them or supervise their proposed revision." That is to say, many publishers were naturally eager to have their books "indorsed," doubtless hoping thereby to increase their sale.

No wise educator who has given any attention to the subject can deny that the influence of this powerful propaganda has been in most respects injurious to the proper teaching of physiology and hygiene in the lower schools. Teachers, principals, superintendents, and even school committees, are seldom able to speak with perfect frankness on the subject, from fear of the influences which may be brought to bear against them or of the intemperate criticism to which they may be exposed; and in my opinion it is time for a body of scientific men like the *American Society of Naturalists* or the *American Association for the Advancement of Science* to put on record its opinion that the subjection under which science and education are to-day suffering from the "temperance physiology" propaganda has become intolerable.

I lately examined with some care a good text-book of elementary physiology and

was shocked on opening it to find at the very beginning, and in a most prominent place, an entire page devoted to an "indorsement" of the book by the self-constituted oligarchy which has the assurance to "approve" or not, as it sees fit, text-books on physiology and hygiene for use in secondary and lower schools. In the case I mention, this committee did not even confine their "approval" to the alcoholic and narcotic portions of the book but "indorsed" also its "amount of matter on general hygiene," as well as the "presentation of matter with regard to its adaptability to the class of students for which it is designed;" or, in other words, passed upon its scientific and pedagogical merit, as well as upon its alcoholic value. If, as would sometimes seem to be the case, it has actually come to pass, at the beginning of this twentieth century, that a writer who desires to publish an elementary text-book on physiology and hygiene, before he can obtain a publisher or a market, may have to secure the "indorsement" of the world's and national superintendent of scientific temperance instruction of the Woman's Christian Temperance Union, of the vice-president of the Massachusetts Total Abstinence Society, and the rest of this self-constituted committee, it is high time that cognizance should be taken of the fact by scientific men and educators and a protest entered.

On further examining the book to which I have just referred, I was even more disturbed to find that this author, like some other recent writers on elementary physiology and hygiene, doubtless with the New York law before his eyes (which requires that "this subject must be treated in the text-books in connection with the various divisions of physiology and hygiene, and pages on this subject in a separate chapter at the end of the book shall not be counted") had actually felt bound to weave in a lesson on alcohol with his discussion of the physiology of muscle, of nerve, of digestion, of vision, and each of several other sections of the subject, so that all his work seemed literally tainted with alcohol.

What I have said thus far of this subject applies mainly to elementary education; but those who have witnessed the virulent attacks upon a conscientious chemist and physiologist, who has recently made important physiological experiments upon the oxidation of alcohol within the human body, because his experiments have seemed to confirm the earlier statements that alcohol in minute quantities is more like a food than a poison, do not need to be told that this same propaganda is quite as eager to bring science, as it has already brought education, under its powerful dominion. Signs are not wanting, however, which indicate that its control has already reached its climax, and even begun to decline.

An attempt in 1899 to make the Massachusetts law conform more closely to the ideas of those interested in "scientific temperance" was stoutly resisted by the Massachusetts Medical Society, as well as by various scientific men and educators, with the result that the statute of 1885 remains unchanged. This prescribes that "physiology and hygiene, which in both divisions of the subject shall include special instruction as to the effect of alcoholic drinks, stimulants, and narcotics on the human system, shall be taught as a regular branch of study to all pupils in all schools supported wholly or in part by public money, except special schools maintained solely for instruction in particular branches, such as drawing, mechanics, art, and like studies." With the exception of the clause "to all pupils" this statute is not unreasonable, for, as I have said above, it is right and proper that the youth of the land should be taught, plainly and thoroughly, the dangers which lurk in alcoholic drinks, in narcotics, etc. What is unnecessary and objectionable is that the exact amount of such teaching should be prescribed by law; and that the method of teaching (by text-books in the hands of the pupils), the space devoted to it, and its treatment, in text-books, should be legally regulated. That, in addition, the particular text-books used should be largely determined by a self-constituted and unofficial oligarchy, leaders of a propaganda, which, in any right use of the terms, is neither educational nor scientific, is both odious and intolerable.

In Connecticut, in 1901, a statute of the objectionable sort referred to above was repealed, and one to which but little exception can be taken was enacted in its place. It is gratifying to note, also, that the department of superintendence of the National Educational Association, at a meeting in Chicago in the early part of the same year, adopted a report containing the following significant, if guarded, paragraphs:

The questions of highest importance for teachers and superintendents of schools to consider [concerning "temperance physiology"] are those which relate to the methods by which temperance instruction shall be imparted, the extent to which it shall be carried and the subject-matter to be presented.

The educational side of this question is vitally important, and demands thorough and systematic study.

This action is timely and welcome in view of the existence of an opinion like the following, expressed in a letter to me by a representative of a prominent publishing house: "I feel that we can not be too emphatic in expressing sympathy with your movement and in denouncing the intimidation of teachers and other educators which has gone on for some years."

THE WILL OF THE PEOPLE, NOT OF AN OLIGARCHY.¹

* * * Professor Sedgwick is now objecting, not to this study, he says, but to the legal specifications which have made it a success. First, he objects to its being taught "to all pupils." He does not tell when or by what class of pupils he would have it omitted. In our country "all pupils" of to-day are destined to be the sovereign people of to-morrow. Hence, looked at from the standpoint of the State, it can not afford that one single pupil should not receive the utmost instruction on this subject needed to fit that pupil for a future sovereignty of intelligent sobriety.

From the standpoint of the individual, we ask, from whose child shall this educational method for the prevention of intemperance be withheld? Shall it be from the children of the poor, the rich, the foreign born, or the home born? We are answered by the command of the greatest of all Teachers that the supreme message for the prevention of evil and the establishment of right should be given "to every creature" in "all the world." That inclusive demand and precedent not only justifies all pupils getting this education, but implies neglect of duty if it is excluded from any.

If Professor Sedgwick's objection is to the requirement of the study through specified grades, as his reference to the Illinois law implies, we answer: The formation of right habits is the object sought. The child's habits are rapidly formed, new ones each year as it proceeds through the first primary to the high school. It is therefore self-evident progressive instruction which will guide in the formation of right habits should be given, especially during the primary, grammar, and first year of the high school, in order to keep pace with and guide the child's development. The boy or girl who leaves school at any point in the school course with as much knowledge as he can comprehend of the laws of health, including those which warn against the use of alcoholic drinks and other narcotics, has thereby a most valuable equipment for the battle of life.

The diffusion of this knowledge in our country is now as universal as the schools. It does not, we grant, add to the value of brewing stocks, but evidence is not lacking that it is proving of great value to the human stock in the increase of health due to better knowledge of sanitary laws, consequent lengthening of life, increased sobriety of the American workman, which sobriety is acknowledged to be one cause of the commercial supremacy of this country in the markets of the world, etc.

¹From a communication in reply to Professor Sedgwick's address, by Mrs. Mary H. Hunt, published in the Journal of the American Medical Association (Chicago), March 22, 1902.

Professor Sedgwick says he was "shocked—much disturbed to find that an author had actually felt bound to weave in a lesson on alcohol with his discussion of the physiology of muscle, of nerve, of digestion, of vision, and each of several other sections of the subject."

Why should not the deleterious effects of alcohol on muscles be taught in connection with the study of the physiology and hygiene of the muscles? Prof. E. Destrée, University of Brussels, by actual experimentation, proved that the "total work product obtained (from the muscles) with the use of alcohol is less than that obtained without it." Our boys and girls need to know that fact. Why should not the fallacy of the idea that alcohol is an aid to digestion be pointed out in connection with the hygiene of digestion, when Professor Chittenden distinctly says of his experiments: "The results obtained suggest a tendency toward prolongation of the period during which the meat remains in the stomach when alcohol fluids are present?" Why is not the treatment of the physiology and hygiene of the nerves the proper place for pointing out the effect of alcohol upon them when H. J. Berkeley, M. D., of Johns Hopkins University, reported as a result of the experiments he performed for the Committee of Fifty that alcohol "possesses the quality of destroying the protoplasm of the nerve cells and annulling its functions." Why not in teaching the care of the eyes mention the danger from the use of alcohol when the senior surgeon of the New York Ophthalmic Hospital says: "The respectable moderate drinker who never takes too much or oversteps the boundary line of decency but goes round half full all the time exposes himself to the risk of losing his eyesight, which in this case is incurable."

To Professor Sedgwick's complaint that some laws require text-books on this subject for pupils' use and specify the amount of temperance matter they shall contain, etc., we reply: The tendency of careless, unsympathetic school boards to fail in providing well-graded text-books on this subject, books that contain the matter the law requires taught as one source of information for pupils sufficiently advanced to use text-books on other subjects, induced the National Congress and many States to legally require that such text-books shall be provided. This requirement has led to the preparation of a valuable school literature by men of acknowledged scientific standing and to the revision of nearly all the imperfect books. Why should Professor Sedgwick complain? No one has proved the books inaccurate, nor that their use in the schools has not contributed to individual and public good. The old, unrevised, ungraded, and therefore unindorsed books contain such teaching as the following for children in primary grades: "The tendon of Achilles is the tendon of the gastrocnemius and soleus muscle," a statement as clear as mud to the primary child. The people want better books for their children and hence have so legislated that better books are produced. * * *

Professor Sedgwick appears to have some fears that a writer who desires to publish an elementary text-book on physiology and hygiene, before he can obtain a publisher or a market, may have to secure the indorsement of Mrs. Mary H. Hunt, etc. Anybody can write a text-book on this subject as far as the scientific department of the Woman's Christian Temperance Union is concerned, but the mothers in any community have a perfect right to oppose their children studying that book, if, in their judgment, it fails to teach the whole truth against the most destructive of human habits. They have a right through organization to secure and protect this form of education for their children and to appoint one of their number to act with them in searching for truth, and, aided by men of science, to refuse indorsement to books that do not contain the truth. I make no apology for its being my fortune to have been thus officially appointed. * * *

As to the publisher's part in this connection, I would say: The publisher is a business man who knows that his success depends upon his supplies meeting the demands of the market. If the condition prevails which Professor Sedgwick describes, it is good evidence that publishers have found that the American peo-

ple do not want their children to study what the publishers themselves call "rum books," and that the indorsement of this department is a guaranty to the public that the books bearing that indorsement are not of that character, but, instead, contain the truths the people want taught their children. Therefore, the writer who wishes to put a "rum book" on the market must find publishers who will ignore the law of supply and demand, or he must persuade the people to allow their children to be sacrificed to the Moloch of intemperance either for his personal gain or to avoid shocking the sensibilities of scientific gentlemen who see no place in physiology and hygiene for warning against that disobedience of hygienic law which causes, as Gladstone said, more havoc to the human race than war, pestilence, and famine. * * *

The superintendent and advisory board of the department of scientific temperance instruction in schools and colleges are elected by the world's and national Woman's Christian Temperance Union to take charge of the work of that society for the study of temperance physiology in schools. Thus this department has for its constituency the largest organization of women in the world, who are banded together to secure as one of their objects the protection of this special education for their children. Hence, to call the work of this department that of a "self-constituted oligarchy," as Professor Sedgwick does, shows utter misapprehension of facts. "A self-constituted oligarchy"—i. e., "power exercised by a few" who are self-appointed, could not write its ideas embodied in law on the Federal statute books and those of all the States of this great Republic. The laws requiring this study and whatever is necessary to its being taught represent the 75,000,000 American people who have decided that their children shall have this special education. It is simply futile to try to belittle this movement by efforts to make it appear as anything less than a national one which is rapidly becoming world-wide.

MARY H. HUNT,

*World and National Superintendent of the Department
of Scientific Temperance Instruction of the
Woman's Christian Temperance Union.*

ALCOHOLIC PHYSIOLOGY IN SCHOOL.¹

Perhaps it is well to teach children something about their little insides, enough to keep them from eating green apples, for example, but it is an easy matter to go too far with infantile instruction in physiology. No doubt it would be sad to find the children of the grammar schools indulging a premature appetite for alcohol and tobacco, but it does not seem to be necessary to teach them what is not true in order to prevent the spectacle of inebriated babes. There is room to suspect that the calling of youthful attention to the real or imaginary effects of alcohol, tobacco, opium, and the like is calculated to arouse an unholy curiosity in their immature minds and lead them to give more interest to the subject than it would naturally receive from them. If the idea be to fortify the children with real or imaginary knowledge as to the appalling effect of alcohol on the stomach, nervous system, liver, kidneys, etc., in order to scare them into refusing drink in later years, it is a mistake. It is not from any ignorance of the effects of alcohol that men drink, whether moderately or excessively. They have had ample warnings as to the breaking down of various organs from the immoderate and long-continued use of liquor, and hardly a day passes but they see somebody in a disgraceful state of helplessness from drink and foresee for him a hideous end unless he shall cease his abuse of alcoholic beverages. It is affirmed by a New England alienist, who is the head of a sanitarium where men of wrecked nervous systems abide, that a fearful percentage of physicians are the incurable victims of

¹ From the Philadelphia Record, January 6, 1902.

the morphia or cocaine habit. Surely no men know better the insidious growth of such habits and the effect on the brain. Clearly, then, a knowledge of the physiological action of stimulants and narcotics does not deter persons from abusing them.

The particular objection which is raised by scientific men against alcoholic physiology in the public schools is that the instruction is false and misleading. Prof. W. N. Rice, of Wesleyan University, recently attacked the instruction in Connecticut as extravagant and in some instances absurd. In one text-book prescribed by law he finds such contradictory statements as that "one-half the commitments to insane asylums are due to overindulgence in alcohol," and that "more persons become insane through the use of tobacco than alcohol." Neither statement is true. The extreme abstainers who construct the text-books seem to think that in the war on whisky and tobacco any degree of misrepresentation is warranted. Most men smoke and a great many use alcoholic liquors in moderation. They naturally object to having their children shocked by the information that their fathers are heading straight for the lunatic asylum. Prof. W. T. Sedgwick, president of the American Association of Naturalists, has just entered his protest against the time which is devoted to the study of the effects of alcohol and tobacco in the public schools, the teaching on which subjects, he maintains, "has passed, to a great and unjustifiable extent, into the hands and under the subjection of the temperance physiology propaganda;" that is to say, into the hands of well-meaning people, who are said by the Rev. Dr. Rainsford, of New York, to be "doing the devil's work." Most scientists agree with the opinion expressed by a prominent Philadelphia physician, that some of the text-books on these subjects "contain senseless and unscientific twaddle."

It is enough to condemn the whole system of instruction in alcoholic physiology that the first and supreme purpose is not to teach what is exactly and undeniably true, but to teach only what is calculated to scare the pupil from the use of alcohol and tobacco. That is not a legitimate function of a scientific text-book.

ENFORCED TEMPERANCE AMONG RAILWAY EMPLOYEES.¹

One of the greatest armies of temperance reformers in the world preaches its doctrine daily in our midst by action, and not by precept or sermon; but few of the thousands who travel up and down the railroads of our country ever stop to consider this silent force which has become stronger in its example and power for good than all the temperance organizations. There are several million men employed in various capacities on the railroads of the United States, and of this considerable army fully 50 per cent occupy responsible positions which render their work of a peculiarly public character. The engineers, firemen, switchmen, and train dispatchers are daily responsible for the lives and property of great numbers, and to prevent mistakes, which might cause great disasters, every possible precaution is taken to eliminate errors.

The discipline of the railroad employees of the country is probably stricter and better enforced than in any other line of work. A number of years ago temperance was not strictly enforced on train men, but the engineers were compelled to report for business in a perfectly sober condition. There were some lax rules in regard to the train men, and it was not uncommon to see many of them drinking at the public houses along the route when their train was waiting for orders. But to-day not only temperance, but almost teetotalism, is enforced on our leading railroads, especially among engineers, firemen, switchmen, and train dispatchers and conductors. The managers of the railroads found that many of the accidents

¹ From Harper's Weekly, January 4, 1902.

were due to drink among the employees, and after considering the problem for a few years the man who could not get along without drinking was gradually forced from the ranks of the railroad employees. To-day these workmen represent the largest and strongest army of upright, sober, industrious men in the world.

Dismissals are common on the railroads to-day for drunkenness, and they must continue so long as human temptations are in existence; but it is becoming more difficult every year for a drinking man to secure any responsible position in the railroad companies. A drinking engineer would no more be tolerated on a railroad than a wild Indian. Such a man might cause more damage and loss to the road than his wages would amount to in a century. The man who has a disposition to drink must be content to seek employment in other lines than on the railroads. The engineers are as a body strictly sober and temperate men. Their calling has made them so. They realize the dangers which they must daily meet, and their responsibilities sober them. It is rarely that an active railroad engineer ever touches liquor on or off duty. Habit makes him dislike to introduce any risk in his work. He knows that liquor might tend to befog his mind some day, and an accident that resulted therefrom would mean his eternal ruin. An engineer discharged for drinking could never hope to find a position on another railroad.

Dismissal for drinking is the worst possible thing that could happen to a railroad man in any position. If he applies to another road he must furnish reference or tell where he was last employed. His record is then looked up, and each road furnishes another with the correct data required. If the dismissal has been for drinking, the applicant is very naturally turned down.

Yet allowances are made for human weakness, and if an otherwise good employee falls once, unless he is an engineer or train dispatcher, he may receive a reprimand and warning. He is then placed on trial, and if he does not repeat his offense he may be retained indefinitely. Indeed, many men have been reformed from drink in this very way. Realizing that their positions depended upon their sobriety, they have steadily refused to touch liquor at all. In this effort to reform they are mightily helped by their associates. These are all railroad men who are placed in the same position; they must live a sober life. Consequently the weak man in the number is encouraged rather than tempted, and his battle is rendered much easier.

Next to the engineers the train dispatchers are probably the most important employees who must observe the strict rule of sobriety. The task of the dispatcher is so difficult that nothing except a perfectly clear, intelligent mind can do the work without endangering the lives and property of others. A train dispatcher who reported for duty with the smell of whisky about him would instantly be reported to the general superintendent. He would receive a warning delivered in no unmistakable words, and a second offense would be followed by instant dismissal. Usually, however, there is little trouble with this class, for the train dispatchers are men of unusual ability and ambition, and they have themselves under perfect control.

The switchmen and yard men have the greatest temptation to drink of any employee, and even when on duty it is easy for them to gratify their thirst. Consequently there are more dismissals of these workmen than of any other grade. This is partly due to the fact that their work is very important and critical, and yet, comparatively speaking, it is not paid well for, and is of a lower grade than that of the train dispatcher or engineer. It does not require talent or a high grade of skill to be a yard man or switchman, but the work does demand clear minds and steady nerves. The switchman who drinks becomes a menace to the whole railroad system.

So many accidents have happened through the negligence of switchmen that the railroads are growing stricter every year with this class of employees. Some roads have promulgated orders which absolutely rule out of their service any man who

drinks at all, and switchmen in particular have to give their pledge that they do not touch liquor in any form. In the opinion of the railroad managers this seems to be the only absolute way of obtaining the services of men who can be depended upon to bring a clear mind to their work daily. Meanwhile the grade and pay of the men are being raised, and better workmen are attracted to the positions.

Railroad managers are pooling their interests in respect to the drink question, so that these great corporations are gradually eliminating the drunkard or the drinking man from the railway service. Every competent railroad man understands this, and he will advise a beginner ambitious to work up in the service to give up absolutely the habit of tipping or drinking at home or in public. No man, however bright, can expect to make a success in railroading who is not willing to yield to this inexorable rule of the road. Thus, from the highest down to the lowest, the railroad men are invariably temperate and sober, and if they ever had the habit of drinking they have bravely overcome it. Consequently the force of example set by this great body of workmen is far more powerful in its effects than any preaching or open advocacy of temperance from a moral point of view. The railroads demand the strictest sobriety, and by rigidly enforcing the rule voluntary teetotalism is spreading throughout the thousands and millions of their employees.

REPORT OF A COMMITTEE OF THE NEW YORK STATE SCIENCE TEACHERS' ASSOCIATION.

In 1898 a committee of five was appointed¹ by the New York State Science Teachers' Association "to ascertain and report what is definitely known regarding the effects of alcohol and narcotics on the human body and to recommend suitable methods for teaching the same in the schools of the State."

Three separate inquiries were conducted in the course of the investigation, and numerous letters of inquiry sent out to teachers in New York State and New England.

In the preliminary report of this committee, which was published in the *Educational Review* (New York) of June, 1902, the committee summed up its conclusions as follows:

1. Physiology is the only subject in the curriculum that is dominated by legislative enactment. The result seems to be that instruction is commonly given in a perfunctory way, or that the provisions of the law regarding temperance instruction are disregarded. It should be remembered that no law, however stringent, can bring about effective teaching when the statements presented to the pupils are questioned or disbelieved by the teacher.

2. The teaching of the effects of stimulants and narcotics under the present system has not produced any marked change of sentiment in the young either for or against their use. If any change exists, it is entirely disproportionate to the outlay of time and effort which has been made.

3. Whether the matter taught is or is not excessive in amount, it is unwisely distributed through the course, and there is frequent and unnecessary repetition.

4. As the result, diminished interest and dislike of the subject prevail.

5. The preponderance of opinion expressed indicates that instruction could profitably be limited to fewer grades; those between the fifth and eighth being preferred.

6. The use of text-books should not be made compulsory earlier than the sixth grade, if at all.

7. Although the text-book may not always be satisfactory, the teachers do not regard this fact as a marked impediment to their work.

8. Charts showing morbid physiological conditions are generally condemned.

9. The evils of alcohol and narcotics can be presented most effectively from the moral and economic point of view.

¹ Membership of the committee: Irving P. Bishop, chairman, State Normal School, Buffalo; Burt G. Wilder, Cornell University; Gaylord P. Clarke, Syracuse University; Eli H. Long, University of Buffalo; James E. Peabody, Peter Cooper High School, New York.

The committee made the following recommendations:

1. The New York State Science Teachers' Association should urge that the present law be modified in such a way that teachers of physiology be given more freedom to decide as to the character and content of their teaching, and writers of text-books more freedom as to the space devoted to the subject and its location in the volume.

2. We are interested in the recent changes effected in the law in the State of Connecticut, and look with favor upon its present provisions. But before recommending similar specific changes in our law we deem it wise to allow a reasonable time to elapse for observation of the working and results of that law.

3. So long as the existing statute remains in force, if truthful instruction is to be given in the subject the possible benefits of alcohol, when prescribed by physicians, should be conceded. The difference in the effects on the human body of fermented beverages (beer and light wines) and distilled liquors should also be noted. Emphasis should be laid, too, on the greater susceptibility of young persons both to direct injury from the use of alcohol in any form and to the danger of forming undesirable habits. Pupils should be allowed also to know that there is wide disagreement among authorities as to the physiological effects of a strictly moderate use of liquors by adults. On the other hand, attention should be called to the fact that the moderate use of alcohol very commonly leads to excess, and the teacher should emphasize the fact that an immoderate use of liquors weakens the tissues, so that they are made more susceptible to disease.

4. Finally, if the teacher wishes to present the strongest arguments in favor of either total abstinence or strict temperance, and thereby fulfill the spirit rather than the letter of the law, your committee recommends that comparatively little time be spent in trying to teach the physiological effects of alcohol and tobacco. Let us frankly admit that we are discussing not so much a question of physiology as one of morals and economics, and let us devote the larger part of the time required by law to a treatment of the question from the moral and economic standpoint.

CHAPTER XXII.

RELATIONS OF THE NATIONAL GOVERNMENT TO HIGHER EDUCATION AND RESEARCH.¹

By CHARLES D. WALCOTT,

Director of the United States Geological Survey.

When one considers the relations of the General Government to higher education and research, probably the first question to arise is, What, within the limitations imposed by the Constitution, can the Government do? Other pertinent inquiries are: What has been done? What is the present policy of the Government? How are its educational resources being utilized? What can be done that is not already being well done by our universities, colleges, and technical institutions?

Many of our wisest and best statesmen and jurists believe that the General Government has no power, under the Constitution, to appropriate money for educational purposes, that important function having been left to the States. A glance backward over the history of colonial and national discussion and legislation is interesting and instructive.

HISTORY OF COLONIAL AND NATIONAL DISCUSSION.

In colonial times Oxford, Cambridge, and Edinburgh were to American youth the centers of learning and higher education. These famous universities furnished all that was needed by the well-to-do student, and local colleges were given little attention and scant support. The founders of our college system were obliged to meet adverse conditions which developed the same qualities that led their compatriots to the conquest of the continent.

Early in the seventeenth century (1619) the Virginia Company granted 10,000 acres of land "for the foundation of a seminary of learning for the English in Virginia." At the suggestion of the King, the bishops of England, in the same year, raised £1,500 to aid in the education of the Indians in connection with the proposed grant of land for the seminary. A portion of the land was occupied and the seminary was started under the direction of George Thorpe, a man of high standing in England. But the institution was short-lived. It, with its inmates and founder, perished in the Indian massacre of 1622.

In 1624 an island in the Susquehanna River was granted for the founding and maintenance of a university, but the undertaking lapsed with the death of its projector and of James I, and the fall of the Virginia Company.

For a time the movement of higher education was delayed, but in 1636 Harvard was founded; then William and Mary, in 1660; Yale, in 1701; the College of New Jersey, in 1746; the University of Pennsylvania, in 1751; Columbia, in 1754; Brown, in 1764; Dartmouth, in 1769; the University of Maryland, in 1784; the University of North Carolina, in 1789-1795; the University of Vermont, in 1791; and Bowdoin, in 1794.

The university spirit was well developed when the Constitutional Convention

¹Substance of address before the University of Chicago, delivered June 17, 1901. Reprinted from *Science*, N. S. Vol. XIII, No. 329, pp. 1001-1015, June 23, 1901.

met in 1787. Madison, who was a member of the convention, acting in harmony with the known wishes of Washington, proposed to give the National Legislature power—

To establish a university.

To encourage, by premiums and provisions, the advancement of useful knowledge and the discussion of science.

Charles Pinckney also earnestly advocated a plan for the establishment of a national university, and Mr. Wilson supported the motion; but the matter was dropped, on the ground that Congress already had sufficient power to enact laws for the support of national education.

John Adams, who agreed with Washington in believing that "scientific institutions are the best lasting protection of a popular government," was always a strong advocate of the promotion of intelligence among the people. He secured the insertion in the constitution of Massachusetts of a provision recognizing the obligation of a State to pursue a higher and broader policy than the mere protection of the temporal interests and political rights of the individual. This provision read as follows:

It shall be the duty of legislatures and magistrates in all future periods of this Commonwealth, to cherish the interests of literature and the sciences * * * to encourage private societies and public institutions, rewards and immunities for the promotion of agriculture, arts, sciences, commerce, trades, manufactures, and the natural history of the country.¹

Washington sought to impress on Congress and the people his earnest conviction that the Government should establish and support a great national university. To this end he made a bequest in his will, and if Congress had treated it as the Legislature of Virginia treated his bequest for the endowment of Washington College, there would be to-day a fund sufficient to give adequate support to a great institution for investigation and original research in the capital city. In his will Washington expressed the fears he entertained as to the effect of foreign education on the youth of America, and the desirability of having an American university. His language was as follows:

That as it has always been a source of serious regret with me to see the youth of these United States sent to foreign countries for the purpose of education, often before their minds are formed, or they have imbibed any adequate ideas of the happiness of their own, contracting too frequently not only habits of dissipation and extravagance, but principles unfriendly to republican government, and to the true and genuine liberties of mankind, which thereafter are rarely overcome. For these reasons it has been my ardent wish to see a plan devised on a liberal scale which would have a tendency to spread systematic ideas through all parts of this rising empire, thereby to do away with local attachments and State prejudices, as far as the nature of things would, or indeed, ought to admit, from our national councils. Looking anxiously forward to the accomplishment of so desirable an object as this is (in my estimation), my mind has not been able to contemplate any plan more likely to effect the measure than the establishment of a university in a central part of the United States, to which the youth of fortune and talents from all parts thereof might be sent for the completion of their education in all the branches of polite literature, in arts, and sciences, in acquiring knowledge in the principles of politics and good government, and (as a matter of infinite importance, in my judgment), by associating with each other, and forming friendships in juvenile years, be enabled to free themselves in a proper degree from those local prejudices and habitual jealousies which have just been mentioned, and which when carried to excess are never-failing sources of disquietude to the public mind, and pregnant of mischievous consequences to this country.

Madison, though defeated in his effort to secure the approval of the Constitutional Convention in respect to the establishment of a national university, did not fail, when President, to call the attention of Congress to the subject. In his second annual message he said:

I can not presume it to be unreasonable to invite your attention to the advan-

¹ Massachusetts Public Statutes, 1882, p. 34.

tages of superadding to the means of education provided by the several States a seminary of learning instituted by the National Legislature, within the limits of their exclusive jurisdiction, the expense of which might be defrayed or reimbursed out of the vacant grounds which have accrued to the Nation within those limits. (*Annals of Congress*, 1810, 1811, 1813.)¹

Various other attempts have been made from time to time to establish a national university. Blackmar says:

In 1796 a proposition was before Congress in the form of a memorial praying for the foundation of a university. (*Ex. Doc.*, Fourth Cong., second sess.)

Again, in 1811, a committee was appointed by Congress to report on the question of the establishment of a seminary of learning by the National Legislature. The committee reported unfavorably, deeming it unconstitutional for the Government to found, endow, and control the proposed seminary. (*Ex. Doc.*, Eleventh Cong., third sess.)

In 1816 another committee was appointed to consider the same subject, and again the scheme failed. (*Ex. Doc.*, Fourteenth Cong., second sess.)²

When the disposition of the Smithsonian fund was under consideration (1838-1846), the subject of founding a national university was fully and freely discussed, and the plan was rejected by Congress.

Again, in 1873, the matter was revived by the Hon. J. W. Hoyt, who from that time onward never ceased to labor diligently for a national university. Largely owing to his zeal and activity, a committee of 100 was formed, various bills were introduced in Congress, and a Senate committee was created to establish a national university. But Congress always looked on the scheme with suspicion, and not one of the various bills offered was ever acted upon by the Senate or House of Representatives.

The trend of opinion has been and is that the Government should not found a national university in the sense suggested by Washington and his followers. The Congress has, however, generously aided technical and higher education by grants of land to States and Territories for educational purposes.

The policy was inaugurated under the general authority of the famous ordinance of July 13, 1787. Conformably thereto a contract was entered into between the Ohio Company and the board of treasury of the United States on the 27th of July, 1787, whereby lot 16 in every township was given for the maintenance of public schools, and not more than two complete townships were given perpetually for the purpose of a university, the land to be applied to the purpose by the legislature of the State.³

The most important act, after that of 1787, was that of 1862, granting land for the endowment of colleges for teaching agriculture and the mechanical arts. It is to be noted that by this act the responsibility was thrown entirely upon the States, and that, so far as the administration of the fund was concerned, it was State, not national, education.

The total grants of lands aggregate about 13,000,000 acres, or 20,000 square miles. Of this 2,500,000 acres, or 4,000 square miles, were for the establishment of higher institutions of learning. This land, divided among 30 States and Territories, gives an average of a little more than 80,000 acres, or about 130 square miles. For technical schools, called "colleges for the benefit of agriculture and the mechanical arts," Congress has granted to 45 States 10,500,000 acres, or about 16,000 square miles. This is an average of 230,000 acres, or about 360 square miles. Congress now grants annually to each of the 45 States \$25,000,⁴ a

¹The History of Federal and State Aid to Higher Education in the United States, by Frank W. Blackmar, Ph. D.; Bureau of Education, Contributions to American Educational History, edited by Herbert B. Adams, No. 9, 1890, p. 32.

²Op. cit., pp. 39, 40.

³Encroft, History of the Constitution, N. Y., 1882, Vol. II, pp. 435, 436. Also George B. Germann, National Legislation Concerning Education, New York, 1899, pp. 19, 20.

⁴Act approved August 30, 1890. Statutes at Large, vol. 26, p. 417.

total of more than \$1,000,000, all of which is expended under the direction of State boards.

The Government maintains, and has maintained since 1802, an academy for training its army officers; also, since 1845, an academy for training its naval officers. The Government does not maintain, and never has maintained, any institution for training its civil officers.

The policy of the Government, as gathered from its acts, has been to relegate the direct control of education to the States, aiding them in this work by grants of land and, in the case of technical education, by grants of money also.

PRESENT POLICY OF THE GOVERNMENT.

Turning, now, to the question, What is the present policy of the Government? we have just seen that aid is given by grants of land and, in the case of the experiment stations, by grants of money. As to the use of its literary and scientific collections by students, its policy was defined by a public resolution of Congress, approved April 12, 1892, which reads as follows:

Whereas large collections illustrative of the various arts and sciences and facilitating literary and scientific research have been accumulated by the action of Congress through a series of years at the National Capital; and

Whereas it was the original purpose of the Government thereby to promote research and the diffusion of knowledge, and it is now the settled policy and present practice of those charged with the care of these collections specially to encourage students who devote their time to the investigation and study of any branch of knowledge by allowing to them all proper use thereof; and

Whereas it is represented that the enumeration of these facilities and the formal statement of this policy will encourage the establishment and endowment of institutions of learning at the seat of Government, and promote the work of education by attracting students to avail themselves of the advantages aforesaid under the direction of competent instructors: Therefore,

Resolved, by the Senate and House of Representatives of the United States of America in Congress assembled, That the facilities for research and illustration in the following and any other Governmental collections now existing or hereafter to be established in the city of Washington for the promotion of knowledge shall be accessible, under such rules and restrictions as the officers in charge of each collection may prescribe, subject to such authority as is now or may hereafter be permitted by law, to the scientific investigators and to students of any institution of higher education now incorporated or hereafter to be incorporated under the laws of Congress or the District of Columbia, to wit:

- One. Of the Library of Congress.
- Two. Of the National Museum.
- Three. Of the Patent Office.
- Four. Of the Bureau of Education.
- Five. Of the Bureau of Ethnology.
- Six. Of the Army Medical Museum.
- Seven. Of the Department of Agriculture.
- Eight. Of the Fish Commission.
- Nine. Of the Botanic Gardens.
- Ten. Of the Coast and Geodetic Survey.
- Eleven. Of the Geological Survey.
- Twelve. Of the Naval Observatory.

The privileges of this act, it will be noted, are limited to scientific investigators and students of institutions incorporated under the laws of Congress or the District of Columbia. This limitation was removed by an act approved March 3, 1901, which reads as follows:

JOINT RESOLUTION to facilitate the utilization of the Government Departments for the purposes of research, in extension of the policy enunciated by Congress in the joint resolution approved April 12, 1892.

WHEREAS * * *

Resolved, That facilities for study and research in the Government Departments, the Library of Congress, the National Museum, the Zoological Park, the Bureau of Ethnology, the Fish Commission, the Botanic Gardens, and similar

institutions hereafter established shall be afforded to scientific investigators and to duly qualified individual students and graduates of institutions of learning in the several States and Territories, as well as in the District of Columbia, under such rules and restrictions as the heads of the Departments and Bureaus mentioned may prescribe.

DISCUSSION AND ACTION IN RECENT YEARS.

Mr. Daniel C. Gilman, in 1897, summarized the situation in relation to the establishment of a national university as follows:¹

First. There is a strong desire, not only among the residents of the Federal city, but among the lovers and promoters of learning throughout the country, that the libraries, collections, instruments, and apparatus belonging to the Government should be opened to students, not as a favor, nor by exception, nor as a passing entertainment, but for study and experiment, according to suitable regulations, and especially under the guidance of such able teachers as may be already engaged in the service of the Government or may be enlisted hereafter for the particular offices of education. So far as this there would be a unanimous, or nearly unanimous, assent.

Second. The universities existing in Washington and near to it, including those of New England, would regard with disfavor, and probably with distrust, an effort to establish, by Congressional action, the University of the United States. In some places there would be positive opposition. * * *

Third. Outside of academic circles, as well as inside, there is a great distrust of the principle that Congress should provide for and direct university education. The fears may be foolish. It is easy to laugh at them. Apprehensions may be pronounced groundless. Nevertheless it will be difficult to get rid of them. There will be an ever-present expectation of political interference, first in the governing body, then in the faculty, and finally in the subjects and methods of instruction. It is true that partisan entanglement may be avoided, but it will be difficult indeed to escape the thralldom.

In the same article it is suggested that the Smithsonian Institution take charge, so that—

The literary and scientific institutions of Washington may be associated and correlated so far, and so far only, as relates to the instruction and assistance, under proper restrictions, of qualified students. * * * Such a learned society may be developed more readily around the Smithsonian Institution, with less friction, less expense, less peril, and with the prospect of more permanent and widespread advantages to the country, than by a dozen denominational seminaries or one colossal University of the United States.

In February, 1899, Dr. William H. Dall, of the Geological Survey, outlined very clearly the conditions and possibilities for post-graduate work in Washington and urged that if any organization was attempted it should be free from Government control.²

Little, if any, advantage was taken of the Congressional resolution of 1892, which restricted opportunities for study and research to the educational organizations of the District of Columbia; but with the recent rapid growth of the Department of Agriculture a considerable number of students have been given opportunity for study and practical training. Secretary Wilson has taken the lead in actually bringing qualified students into the laboratories of a Government department and setting them to work. He has inaugurated a new class, called "student assistants," and has demonstrated its practical value. In his report for 1898 he says:³

George Washington, by his will, left property to be devoted to university education in the District of Columbia. There is no university in the land where the young farmer may pursue post-graduate studies in all the sciences relating to production. The scientific divisions of the Department of Agriculture can to some extent provide post-graduate facilities. Our chiefs of division are very proficient in their lines; our apparatus the best obtainable; our libraries the most complete of any in the nation. We can direct the studies of a few bright young people in

¹ Century Magazine, November, 1897.

² American Naturalist, Vol. 33, pp. 97-107.

³ Yearbook of the Department of Agriculture, 1898, pp. 18, 19.

each division, and when the Department requires help, as it often does, these young scientists will be obtainable.

They should be graduates of agricultural colleges and come to the Department of Agriculture through a system of examination that would bring the best and be fair to all applicants. The capacity of the Department is limited, but something can be done that will indicate to Congress the value of the plan. The Department often needs assistants to take the place of those who are tempted to accept higher salaries in State institutions. The opening of our laboratories to post-graduate work would provide an eligible list from which to fill vacancies as they occur, supply temporary agents, and be a source from which State institutions might get assistance in scientific lines.

The Department of Agriculture naturally turns to the professedly agricultural colleges for its student assistants, but if other institutions gave their students such instruction as would qualify them for the work of that Department there seems to be no good reason why they should be discriminated against.

As the development of the work progressed in the scientific bureaus it became impossible to find men qualified for the permanent positions open to them. Graduate students were obtainable, but they were without practical training for the work. The Civil Service Commission was called on, but it had no eligibles on its lists. The only way out of the difficulty seemed to be for the heads of the scientific bureaus to select bright, well-educated young men and train them. This they have been doing for several years. In the Geological Survey graduate students, being the best men available for temporary field assistants in both geologic and topographic work, are given preference. The Survey cooperates with such institutions of learning as are willing to give the advanced instruction necessary to fit students to engage in the several special lines of investigation. This cooperation consists mainly in the employment of graduate students and instructors. A high standard is maintained by the character of the examinations held for selecting temporary employees. For example, in the examination for temporary geologic assistants held April 23 and 24, 1901, the applicants were obliged to meet the following requirements:

First. To write an essay of more than a thousand words, setting forth either the course and results of an original geologic investigation by the applicant or the main features of the geology of some State.

Second. To answer satisfactorily seven questions, so selected as to test the applicant's knowledge of the science of geology in general.

Third. To select one of the five specialties, stratigraphy, petrography, paleontology, physiography, and glaciology, and make clear the possession of an adequate knowledge thereof.

The weight given to the various subjects was as follows:

Geological essay, including composition and drawing	30 per cent.
General geology.....	15 per cent.
Special geology.....	25 per cent.
Education and experience	30 per cent.

Fifty-two persons took this examination, and of these 46 made an average of more than 70 per cent. The successful applicants have received degrees for academic and graduate study from the following institutions of learning:

Harvard University.....	13	Alfred University.....	1
Johns Hopkins University.....	6	Beloit College.....	1
University of Chicago.....	6	Columbia University.....	1
Yale University.....	5	Columbian University.....	1
Cornell University.....	4	Cornell College, Iowa.....	1
University of Wisconsin.....	2	Denison University.....	1
University of California.....	2	Gates College.....	1
University of Kansas.....	2	German Wallace College.....	1
Stanford University.....	2	Hamilton College.....	1
Iowa State College.....	2	Heidelberg College, Ohio.....	1
Amherst College.....	2	Heidelberg, Germany.....	1
Munich.....	2	Indiana State University.....	1

Lafayette College	1	University of Missouri	1
Lawrence Scientific School	1	University of Nebraska	1
Moore's Hill College	1	University of the City of New York	1
Ohio Wesleyan University	1	University of Oregon	1
University of Illinois	1	University of South Carolina	1
University of Minnesota	1	Williams College	1

The total of 46 successful applicants divides by State residence as follows:

Massachusetts	9	Colorado	1
Illinois	7	Kansas	1
New York	7	Kentucky	1
Iowa	3	New Jersey	1
Connecticut	2	Ohio	1
Indiana	2	Oregon	1
Missouri	2	Tennessee	1
Pennsylvania	2	Wisconsin	1
South Carolina	2	Wyoming	1
California	1		

Of those who passed, 40 have received appointments to temporary positions. It is probable that 50 per cent of the number will become permanent members of the Survey; 38 per cent already hold or will obtain positions as instructors in educational institutions, and the others will enter State surveys and private employment.

Of the temporary geologic force of the Survey other than those mentioned, and who receive pay only when actually employed, the majority are connected with institutions of learning, as follows:

Harvard University	4	Johns Hopkins University	1
University of Chicago	4	Ohio State University	1
University of Wisconsin	3	University of Michigan	1
Columbia University	2	University of California	1
Stanford University	2	University of Virginia	1
Yale University	2	University of West Virginia	1
Amherst College	1	University of South Dakota	1
Clark University	1	Vanderbilt University	1
Colyb University	1	Williams College	1

The preceding statements illustrate the intimate relation existing between one division of one bureau of one department of the Government and the higher educational interests of the country. A close analysis of the personnel of other bureaus will doubtless show that the Government is thus indirectly doing a great work in fostering higher education and research, and it will at the same time be seen that the educational institutions of the country are training men and women for the highest scientific and technical positions in the Government service.

The Association of Agricultural Colleges and Experiment Stations several years ago realized the importance of giving its students the training which would enable them to meet the conditions prevailing in Washington. A committee of graduate study in Washington was appointed in July, 1897.¹ In the following April this

¹ *Resolved*, That a committee of five be appointed by the President to investigate, consider, and, if practicable, devise a plan whereby graduate students of the land-grant and other colleges may have access to and the use of the Congressional Library and the collections in the Smithsonian Institution, the National Museum, and the scientific bureaus of the various departments at Washington of the United States Government for the purposes of study and research, said plan to include suggestions as to the manner in which such work may be organized, coordinated, and directed to the best advantage; the composition and organization of such a staff as may be necessary to properly coordinate and direct such work, and also an outline of such legislation as may be necessary to effect the general purposes of this resolution. (Proceedings of Twelfth Annual Convention of the Association of American Agricultural Colleges and Experiment Stations, held at Washington, D. C., November 15-17, 1898, being Bulletin 65, Department of Agriculture, p. 53.)

committee met in Washington to study the conditions under which work might be undertaken. In a report made in November, 1898, the committee said in part:

After long deliberation and full discussion your committee are unanimously of the opinion that the time is ripe for expeditious action.

The inquiries and investigations so far made lead the committee to the conclusion that it is entirely practicable to provide for the use of the Library of Congress and the collections of the Smithsonian Institution, the National Museum, and of the various scientific and other bureaus in the several departments of the General Government, by graduate students of the land-grant and other colleges, for study and research, and that it is also practicable to organize, coordinate, and direct such work so as to make it eminently effective.

The committee has been greatly desirous that some existing agency be found to undertake such work of organization, coordination, and direction, and have naturally turned to the Smithsonian Institution as the one best fitted for the purpose.

The committee is unable, at the present time, to present a complete outline of the legislation necessary to effect the general purposes of the resolution. It submits tentatively, however, that Congress might be asked to provide for the establishment of an administrative office in Washington, preferably in the Smithsonian Institution, in which graduate students of the institutions we represent, and others as well, might be enrolled and directed to the appropriate departments (Bull. 65, Dept. Agr., pp. 61, 62).

In a report by the subcommittee of the committee of the National Educational Association on the establishment of a national university, we find that the active cooperation of the Smithsonian Institution is contemplated in the conduct of the proposed school or bureau, but that the committee of the Regents of the Smithsonian Institution feel that the powers of the institution, as at present organized, are insufficient to embrace the work proposed.¹

At a meeting of the Smithsonian Regents held on January 24, 1900, Dr. Alexander Graham Bell introduced a resolution to the effect that Congress be asked to provide for an assistant secretary of the Smithsonian Institution in charge of research in the Government departments, etc. The resolution was referred to a committee, which, on January 23, 1901, reported a modified form of the original resolution. This modified form was adopted by the Board of Regents. It reads as follows:

In order to facilitate the utilization of the Government departments for the purpose of research, in extension of the policy enunciated by Congress in the joint resolution approved April 12, 1892:

Resolved, That it is the sense of the board that it is desirable that Congress extend this resolution so as to afford facilities for study to all properly qualified students or graduates of universities, other than those mentioned in the resolution, and provide for the appointment of an officer whose duty it shall be to ascertain and make known what facilities for research exist in the Government departments, and arrange with the heads of the departments and with the officers in charge of the Government collections, on terms satisfactory to them, rules and regulations under which suitably qualified persons might have access to these collections for the purpose of research with due regard to the needs and requirements of the work of the Government; and that it should also be his duty to direct, in a manner satisfactory to the heads of such departments and officers in charge, the researches of such persons into lines which will promote the interests of the Government and the development of the natural resources, agriculture, manufactures, and commerce of the country, and (generally) promote the progress of science and the useful arts, and the increase and diffusion of knowledge among men.

This resolution referred the matter to Congress. Many members of both Houses doubt whether Congress has power under the Constitution to appropriate money raised by taxation for purposes of education, and nothing was done by Congress, as the resolution was not officially brought before it.

¹Science, N. S., Vol. XI, March 16, 1900, pp. 410-414.

ORGANIZATION OF THE WASHINGTON MEMORIAL INSTITUTION.

At this point the Washington Academy of Sciences undertook to give the proposition to utilize the resources of the Government for higher education and research a practical form, independent of direct Government support or control. For several months the academy had been conferring with the George Washington Memorial Association relative to erecting in Washington a memorial building to be dedicated to science, literature, and the liberal arts. The president of the academy suggested to the memorial association that it should so amend its act of incorporation that it could cooperate with the academy in carrying out the objects common to both organizations. The suggested amendments were made, and an agreement was entered into substantially as follows:

The objects of the George Washington Memorial Association are, first, as implied in its name, the creation of a memorial to George Washington; and second, as stated in its amended act of incorporation, the increase in the city of Washington of opportunities and facilities for higher education, as recommended by George Washington in his various annual messages to Congress, notably the first—i. e., "the promotion of science and literature," substantially as set forth in his last will, and by and through such other plans and methods as may be necessary or suitable. The object of the Washington Academy of Sciences, the federated head of the scientific societies of Washington, is the promotion of science, the term "science" being used in its general sense—"knowledge, comprehension of facts and principles."

The two organizations agreed, first, that, although American universities have so developed since George Washington's time that they fulfill many of the objects of the national university outlined by him as desirable for the youth of the United States, there is still need of an organization in the city of Washington which shall facilitate the utilization of the various scientific and other resources of the Government for purposes of research, thus cooperating with all universities, colleges, and individuals in giving to men and women the practical post-graduate training which can not be obtained elsewhere in the United States and which is now available only to a limited degree in the city of Washington; and, second, that the best method of securing the objects for which both organizations stand is the establishment, within the district selected by Washington as a site for the permanent seat of Government of the United States, of an institution whose object shall be the realization of Washington's repeatedly expressed wish and recommendation that provision be made for the promotion of science and literature.

The membership of the academy includes most of the leading scientific men of Washington and the country at large. The academy, familiar with conditions in Washington and with the efforts of the committees of the Association of Agricultural Colleges and Experiment Stations and the National Educational Association, and knowing that the Smithsonian Institution would not, under its limitations, take an active part, realized that the time was opportune for a new organization. Its committee drafted and secured the passage of the act of Congress approved March 3, 1901. The committee next drafted a plan of organization, which was accepted by the academy and memorial association. The plan was, in brief, as follows:

1. Organization.—A private foundation independent of Government support or control.

2. Objects.—(a) To facilitate the use of the scientific or other resources of the Government for research.

(b) To cooperate with universities, colleges, and individuals in securing to properly qualified persons opportunities for advanced study and research.

3. Government.—The policy, control, and management to vest in a board of fifteen trustees, and in addition there shall be an advisory board composed chiefly of heads of Executive Departments, Bureaus, etc.

Articles of incorporation were then drawn up and executed, and were filed on May 20, 1901. They read as follows:

Articles of incorporation, Washington Memorial Institution.

We, the undersigned, persons of full age and citizens of the United States, and a majority of whom are citizens of the District of Columbia, being desirous to establish and maintain, in the city of Washington, an institution in memory of George Washington, for promoting science and literature, do hereby associate ourselves as a body corporate, for said purpose, under the general incorporation acts of the Congress of the United States enacted for the District of Columbia; and we do hereby certify in pursuance of said act as follows:

First. The name or title by which such institution shall be known in law is the Washington Memorial Institution.

Second. The term for which said institution is organized is nine hundred and ninety-nine years.

Third. The particular business and objects of the institution are to create a memorial to George Washington, to promote science and literature, to provide opportunities and facilities for higher learning, and to facilitate the utilization of the scientific and other resources of the Government for purposes of research and higher education.

Fourth. The number of its trustees for the first year of its existence shall be fifteen.

In testimony whereof we have hereto set our names and affixed our seals, at the city of Washington, in the District of Columbia, on the 16th day of May, 1901:

DANIEL C. GILMAN.	[SEAL.]
CHARLOTTE EVERETT HOPKINS.	[SEAL.]
C. HART MERRIAM.	[SEAL.]
GEORGE M. STERNBERG.	[SEAL.]
CHAS. D. WALCOTT.	[SEAL.]
CARROLL D. WRIGHT.	[SEAL.]

DISTRICT OF COLUMBIA, ss:

Be it remembered that on this 16th day of May, A. D. 1901, before the subscriber personally appeared the above-named Daniel C. Gilman, Charlotte Everett Hopkins, C. Hart Merriam, George M. Sternberg, Charles D. Walcott, and Carroll D. Wright, to me personally known and known to me to be the persons whose names are subscribed to the foregoing instrument of writing, and severally and personally acknowledged the same to be their act and deed for the uses and purposes therein set forth.

Given under my hand and official seal the day and year above written.

[SEAL.]

HERBERT W. GILL, *Notary Public.*

On May 27 fifteen trustees were elected, and on June 3 the officers for the first year were chosen. Lists of these are given herewith:

Board of trustees, Washington Memorial Institution.

1, Dr. Edwin A. Alderman, president Tulane University; 2, Dr. A. Graham Bell, regent Smithsonian Institution; 3, Dr. Nicholas Murray Butler, professor of philosophy and education, Columbia University; 4, Dr. C. W. Dabney, president University of Tennessee; 5, Dr. D. C. Gilman, president Johns Hopkins University; 6, Dr. A. T. Hadley, president Yale University; 7, Dr. William R. Harper, president University of Chicago; 8, Mrs. Phoebe A. Hearst, regent University of California; 9, Mrs. Archibald Hopkins, president George Washington Memorial Association; 10, Dr. C. Hart Merriam, chief United States Biological Survey; 11, Dr. Cyrus Northrup, president University of Minnesota; 12, Dr. H. S. Pritchett, president Massachusetts Institute of Technology; 13, Dr. George M. Sternberg, Surgeon-General United States Army; 14, Hon. Charles D. Walcott, president Washington Academy of Sciences and Director United States Geological Survey; 15, Hon. Carroll D. Wright, Commissioner of Labor.

Officers of Washington Memorial Institution.

Daniel C. Gilman, director; Charles D. Walcott, president board of trustees; Nicholas Murray Butler, secretary board of trustees; C. J. Bell, treasurer.

An advisory board also was selected, as follows:

President of the United States, Chief Justice of the United States, Secretary of State, Secretary of the Treasury, Secretary of War, Secretary of the Navy, Secretary of the Interior, Secretary of Agriculture, Postmaster-General, Attorney-General, Secretary of the Smithsonian Institution, Commissioner of Education, Librarian of Congress, Commissioner of Labor, Commissioner of Fish and Fisheries, president of the Civil Service Commission, president of the National Academy of Sciences, president of the National Educational Association, president of the Association of American Universities, president of the Association of Agricultural Colleges and Experiment Stations, and Dr. Charles W. Eliot.

The duties of the director, as defined in the by-laws, are as follows:

The director shall be the chief executive of the institution, and, under the guidance and control of the executive committee, shall conduct its affairs. He shall make all arrangements for cooperation between the institution on the one hand and the Government, universities, colleges, learned societies, and individuals on the other, subject to the approval of the executive committee.

EXISTING FACILITIES FOR STUDY AND RESEARCH.

The policy of the Government as expressed is to aid in higher education and research by granting the use of such facilities as are at its command in the District of Columbia. The direct control of higher education has been relegated to the States, the Government aiding by grants of land, and in the case of technical education at agricultural experiment stations by grants of money.

The Government has carried on original research for its own purposes in the District of Columbia through grants of money to its various scientific and technical bureaus, notably those of the Department of Agriculture, the Coast and Geodetic Survey, the Geological Survey, the National Museum, the Bureau of Ethnology, the Fish Commission, the Bureau of Education, the Library of Congress, etc.

Of the total sum appropriated for the fiscal year 1901, at least 25 per cent, or \$2,020,000, may be regarded as expendable for scientific and research work and in the interest of higher education. The appropriations for the year are as follows:

Department of Agriculture:		
Weather Bureau	\$1,168,320.00	
Bureau of Animal Industry	1,154,630.00	
Bureau of Plant Industry	204,680.00	
Bureau of Forestry	185,440.00	
Bureau of Chemistry	35,800.00	
Bureau of Soils	100,140.00	
Division of Entomology	36,200.00	
Division of Biological Survey	32,800.00	
Agricultural experiment stations	789,000.00	
Miscellaneous	222,000.00	
		\$3,937,410.00
War Department, Army Medical Museum and Library		25,000.00
Navy Department:		
Hydrographic Office	136,518.00	
Naval Observatory	226,461.08	
Nautical Almanac	15,900.00	
		378,879.08
Interior Department:		
Geological Survey	1,023,423.11	
Bureau of Education	59,370.00	
		1,082,793.11
Treasury Department:		
Coast and Geodetic Survey	830,345.00	
Bureau of Standards	167,140.00	
Marine Hospital	71,100.00	
		1,068,585.00
Smithsonian Institution:		
National Museum	289,400.00	
Bureau of American Ethnology	50,000.00	
National Zoological Park	80,000.00	
Astrophysical Observatory	12,000.00	
International exchanges	24,000.00	
		455,400.00
Commission of Fish and Fisheries		543,120.00
Botanic Gardens		24,393.75
Library of Congress		565,845.00
Total		8,080,925.94

This is about 10 cents per capita for the entire population.

Great collections of books, specimens, statuary, paintings, instruments, apparatus, etc., have been assembled in Washington.

Libraries.—Statistics of the principal libraries reveal the presence of a large number of books, maps, and pamphlets, many collections of which are exceptionally complete in special lines of research, notably those of the Departments of State and Agriculture, the Geological Survey, the Naval Observatory, the Surgeon-General's Office, the Bureau of Education, the Museum of Hygiene, the Patent Office, the National Museum, and special collections in the Library of Congress. The principal libraries are here listed:

Library of—	Books.	Pamphlets.	Maps.
Congress.....	¹ 1,000,000	.....	55,760
Smithsonian Institution.....	² 250,000	.....	.....
United States Supreme Court.....	280,000	.....	.....
Army Medical Museum.....	135,058	229,546	.....
Department of Agriculture.....	68,000	.....	.....
Bureau of Education.....	81,872	140,004	.....
Patent Office.....	74,140	.....	.....
Department of State.....	63,000	2,500	.....
Geological Survey.....	47,600	77,027	29,185
National Museum.....	25,000	30,000	.....
Coast and Geodetic Survey.....	16,405	6,178	25,000
Weather Bureau.....	18,000	5,000	.....
Museum of Hygiene.....	11,969	.....	.....
Hydrographic Office.....	5,000	.....	.....
Bureau of Ethnology.....	12,000	4,000	.....
Bureau of Statistics.....	6,000	5,000	.....
Department of Justice.....	30,000	.....	.....
Department of Labor.....	7,051	4,454	.....
Corcoran Gallery of Art.....	2,540	.....	.....
Treasury Department.....	22,000	3,000	.....
War Department.....	49,000	2,000	.....
Navy Department.....	33,635	.....	.....
Interior Department.....	15,000	.....	.....
Post-Office Department.....	12,000	.....	.....
Light-House Board.....	5,000	.....	.....
War Records Office.....	2,000	.....	.....
Naval Observatory.....	20,000	4,600	.....
Nautical Almanac Office.....	2,200	2,500	.....
Total.....	2,092,430	515,209	109,885

¹ Books and pamphlets.

² These figures are included in the 1,000,000 assigned to the Library of Congress.

Other libraries in the District bring the grand total to more than 2,500,000 volumes, 570,000 pamphlets, and 110,000 maps, assembled in large part by specialists in every field. All the libraries are accessible, and are maintained at a high standard of efficiency.

Collections.—The collections of the National Museum, though inadequately housed, and with insufficient laboratories for the work of the regular museum force, are nevertheless of such character and are so arranged for exhibition and study that they will be of great service to all who may wish to use them. Under the present organization of the Museum there are three departments—anthropology, biology, and geology. All the exhibits are systematically classified and placed in immediate charge of specialists acquainted with the results of man's activity in almost every form in which such results admit of study and representative exhibition. As provided by statute, the collections made by the Geological and other surveys are deposited in the National Museum after they have been used by the organization which collected them. This has resulted in an immense accumulation of material, much of which has not yet been fully studied, and upon which, when sufficient laboratory space is provided, students can be employed under the oversight of the specialists in charge.

The collections of the Army Medical Museum have a world-wide reputation and contain a great quantity of unique and valuable material. There are large

collections of living animals at the Zoological Park, and there is a fine series, illustrating fish culture, at the Fish Commission building. The museum of the Agricultural Department contains valuable material, especially the working collections of the different divisions, and the Botanic Gardens are capable of great development under scientific direction. To the student interested in the development of American inventive genius and the industries represented by patents, the collection of models and drawings in the Patent Office offers exceptional opportunities. Mention should also be made of the collections of apparatus of various kinds in Government laboratories, and of the illustrations of the evolution of apparatus in the National Museum and Smithsonian Institution.

In art, while the collections are not so large as in other lines, yet there is a collection of excellent quality in the Corcoran Gallery of Art, which maintains a free school. In this school day and night classes are taught the arts of drawing and painting, free of tuition fees or charge of any kind. Up to the close of 1899, 844 pupils had received instruction in the day school and 1,483 in the night school.

The Naval Observatory has a good equipment, including a chart and a chronometer depot, an extensive collection of instruments used in taking astronomic photographs, a fine telescope and transit instruments, used in carrying on its routine work.

The newly created National Bureau of Standards is to have buildings and a fine equipment of all necessary apparatus. When fully developed it will be second to none in the character and value of its scientific and practical work. The functions of this bureau are defined in the organic act as follows:

The functions of the bureau shall consist in the custody of the standards; the comparison of the standards used in scientific investigations, engineering, manufacturing, commerce, and educational institutions with the standards adopted or recognized by the Government; the construction, when necessary, of standards, their multiples and subdivisions; the testing and calibration of standard measuring apparatus; the solutions of problems which arise in connection with standards; the determination of physical constants and the properties of materials, when such data are of great importance to scientific or manufacturing interests and are not to be obtained of sufficient accuracy elsewhere.

Law and diplomacy.—The State Department has accumulated a valuable library relating to international law. The law library of Congress contains more than 50,000 volumes exclusively legal in character, and accommodations are provided for students who wish to use it. The school of diplomacy of Columbian University is one of the unique features of the educational organizations of Washington. The Supreme Court of the United States and the Court of Claims bring together the foremost American lawyers. There is also the supreme court of the District of Columbia, which has the common-law, equity, and probate jurisdiction of State courts, besides that of the circuit and district courts of the United States.

There are, of course, unequalled opportunities for studying the development of legislation and for meeting the leading statesmen and public men of the country.

Medicine.—The Army Medical Museum has one of the finest collections in existence of recent pathologic specimens. These, taken with the library of the Surgeon-General's Office, in the same building, afford a rare opportunity for the medical student. In the adjoining National Museum there is a most complete collection illustrating the *materia medica* of the United States and of foreign countries. There are also several hospitals, at each of which clinical instruction is given.

Congress has enacted that these vast collections and resources shall be available for higher education and research, but it has not provided the machinery for making them practically available. As in the case of the grants of land to colleges, Congress provides facilities and indirectly the means, but it leaves to other agencies the task of devising ways and means to make them practically useful.

The Government is obliged to train most of its specialists. Opportunities for post-graduate study and research exist at a few of the strongest universities, colleges, and technical schools of the country, but at best the training given, except in a few branches, is of a preparatory character. Most American youth who are ambitious to pursue higher study and research have little opportunity, owing largely to the fact that the instructor's duties leave him scarcely any time for research and practical work with the student. Post-graduate students seek instructors distinguished for research, even to the extent of undergoing many privations and leaving their country. In the city of Washington the Government has assembled the largest body of original investigators to be found in any one place in the world. Most of these investigators are willing to train suitably qualified students, because of the assistance the students can give them in the work they have in charge, the method being to have the students do actual, practical work, and not to instruct them in the ordinary sense of the word. An unofficial inquiry indicates the following as a possible number of instructors and students in the various departments and bureaus at Washington:

	Instruct- ors.	Stu- dents.
History and diplomacy	1	5
Historical research	5	10
Library administration and methods	5	15
Statistics	2	5
Magnetism	1	2
Meteorology	5	15
Tides	1	2
National Standards, Bureau of		
Astronomy	3	8
Physics	2	3
Hydrography	5	10
Cartography, etc.	2	5
Topography	10	20
Chemistry	6	10
Mineral resources	1	5
Geology	10	17
Paleontology	5	7
Animal industry	10	25
Anthropology and ethnology	4	13
Zoology	34	50
Botany	11	25
Forestry	10	20
Total	133	272

With the development of a well-considered plan, just alike to the student and to the officers of the Government, the number of students—or, more strictly speaking, student assistants—would increase from year to year. Most of the students would naturally come from institutions of learning; in all such cases the student should be certified to the director of the Washington Memorial Institution, and finally certified back to the parent institution after completing his work, such certificate to be based on the work done and the proficiency made. In the case of individual students not connected with any institution, let each prove his capacity to profit by the opportunities, and then accredit him to the special officer who has charge of the field of work in which he may wish to study. On satisfactory completion of the work undertaken, the certificate of the Washington Memorial Institution might be addressed "To whomsoever it may concern." Students working in Government laboratories, museums, and libraries would be subject to the rules obtaining therein.

It is the belief of many acquainted with the educational system of the country that the policy above outlined will result in a body of trained students, ready for expert work, many of whom will undoubtedly enter the Government service, while others will become instructors in institutions of learning or be engaged as

experts in private capacity. This will avoid competition with other institutions, will give most valuable training and practical experience to students, and will be especially helpful to instructors in educational institutions, who might wisely be sent for six months or a year to Washington, as at present some are sent abroad. There should be no thought of providing a general or liberal course of education. Coming as student assistants, there should be opportunities and encouragement only on clearly defined lines of study and investigation. There are many large and small problems to be worked out by the officers of the Washington Memorial Institution, but with the skilled educator and organizer now at its head as director their successful solution is only a matter of time. It is anticipated that the Washington Memorial Institution will, under the direction of Dr. Gilman, begin its work by November 1, 1901.

The Government's part in the work, when once under successful headway, will be to enlarge the quarters of the various bureaus concerned. This will be necessary eventually even if no student assistants are provided for. The Government has done its part nobly so far. It is now for the educational institutions of the country to come forward and assist by setting a high standard of scholarship for admission to the privilege of becoming a student assistant in the Government bureaus. Only students of the type of those who win fellowships or excel in ability should be certified or accepted.

The Washington Memorial Institution should, and I believe will, maintain a standard that will meet the approval of our colleges and universities. It should occupy a most important place in the great educational work of the country. With the hearty cooperation of our collegiate institutions and of the officers of the Government there is little question that it will ultimately become the federated head and clearing house of all the higher educational interests of the country.

The relations of the National Government to higher education and research are intimate and complex; but the complexities are already partially resolved, the present is auspicious, and the future outlook is most promising. Long ago the nation recognized its obligation "to promote a higher and more extended policy than is embraced in the protection of the temporal interests and political rights of the individual." The action of Congress in the present year in opening the Government bureaus at Washington for study and research is a long stride forward, and if carried out in good faith must result in another and higher standard for American endeavor.



CHAPTER XXIII.

THE CARNEGIE INSTITUTION OF WASHINGTON, D. C.,

WITH AN APPENDED LIST OF THE PRINCIPAL EDUCATIONAL BENEFICATIONS OF ANDREW CARNEGIE IN THE UNITED STATES AND A STATEMENT OF HIS GIFT IN AID OF HIGHER EDUCATION IN SCOTLAND.

Surplus wealth is a sacred trust to be administered during life by its possessor for the best good of his fellow-men, and I have ventured to predict the coming of the day—the dawn of which, indeed, we already begin to see—when the man who dies possessed of available millions which were free, and in his hands to distribute, will die disgraced.—*Andrew Carnegie.*

[The foundation of the Carnegie Institution marks a notable step forward in the development of the instrumentalities of higher education in the United States. Being designed more particularly to promote and afford substantial aid to study and original research, it promises to become an active agency in effecting the solution of many of the problems which are engaging the attention of students and others, thereby enlarging the bounds of human knowledge.

The following documents and statements relating to the foundation and organization of the institution are reprinted here to show its general character, objects, and the methods to be employed, so far as they have yet been given definite shape.]

ARTICLES OF INCORPORATION (JANUARY 4, 1903).

We, the undersigned, persons of full age, and citizens of the United States, and a majority of whom are citizens of the District of Columbia, being desirous to establish and maintain in the city of Washington, in the spirit of Washington, an institution for promoting original research in science, literature, and art, do hereby associate ourselves in a body corporate for said purpose, under an act to establish a code of law for the District of Columbia approved March third, nineteen hundred and one, sections 599 to 604, inclusive; and we do hereby certify in pursuance of said act as follows:

First, the name or title by which such institution shall be known in law is Carnegie Institution; second, the term for which said institution is organized is perpetual; third, the particular business and objects of the institution are the promotion of study and research, with power (a) to acquire, hold, and convey real estate and other property necessary for the purposes of the institution as herein stated, and to establish general and special funds; (b) to conduct, endow, and assist investigation in any department of science, literature, or art, and to this end to cooperate with governments, universities, colleges, technical schools, learned societies, and individuals; (c) to appoint committees of experts to direct special lines of research; (d) to publish and distribute documents; (e) to conduct lectures; (f) to hold meetings; (g) to acquire and maintain a library; (h) and, in general, to do and perform all things necessary to promote the objects of said institution; fourth, that the affairs, funds, and property of the corporation shall be in general charge of a board of trustees, the number of whose members for the

first year shall be twenty-seven (27), and shall not thereafter exceed thirty except by a three-fourths vote of said board.

In testimony whereof we have hereto set our names and affixed our seals, at the city of Washington, in the District of Columbia, on the fourth day of January, 1902.

JOHN HAY.	[SEAL.]
EDWARD D. WHITE.	[SEAL.]
JOHN S. BILLINGS.	[SEAL.]
DANIEL C. GILMAN.	[SEAL.]
CHARLES D. WALCOTT.	[SEAL.]
CARROLL D. WRIGHT.	[SEAL.]

DISTRICT OF COLUMBIA, ss:

Be it remembered that on this 4th day of January, A. D. 1902, before the subscriber personally appeared the above-named John Hay, Edward D. White, John S. Billings, Daniel C. Gilman, Charles D. Walcott, and Carroll D. Wright, to me personally known and known to me to be the persons whose names are subscribed to the foregoing instrument of writing, and severally and personally acknowledged the same to be their act and deed for the uses and purposes therein set forth.

Given under my hand and official seal the day and year above written.

[SEAL.]

WILLIAM MCNEIR, *Notary Public*.

Received for record Jan. 4, A. D. 1902, 11 a. m., and recorded in Liber No. 9, fol. 420 *et seq.*, one of the incorporation records of the District of Columbia.

GEO. F. SCHAYER, *Deputy Recorder*.

BOARD OF TRUSTEES (ORGANIZED JANUARY 29, 1902).¹

Ex officio.—The President of the United States, the President of the Senate, the Speaker of the House of Representatives, the Secretary of the Smithsonian Institution, the President of the National Academy of Sciences.

John S. Billings, New York; William E. Dodge, New York; William N. Frew, Pennsylvania; Lyman J. Gage, Illinois; Daniel C. Gilman, Maryland; John Hay, District of Columbia; Abram S. Hewitt, New Jersey; Henry L. Higginson, Massachusetts; Henry Hitchcock, Missouri; Charles L. Hutchinson, Illinois; William Lindsay, Kentucky; Seth Low, New York; Wayne MacVeagh, Pennsylvania; D. O. Mills, New York; S. Weir Mitchell, Pennsylvania; William W. Morrow, California; Elihu Root, New York; John C. Spooner, Wisconsin; Andrew D. White, New York; Edward D. White, Louisiana; Charles D. Walcott, District of Columbia; Carroll D. Wright, District of Columbia.

TRUST DEED BY ANDREW CARNEGIE CREATING A TRUST FOR THE BENEFIT OF THE CARNEGIE INSTITUTION OF WASHINGTON, D. C.

I, Andrew Carnegie, of New York, having retired from active business, and deeming it to be my duty and one of my highest privileges to administer the wealth which has come to me as a trustee in behalf of others; and entertaining the confident belief that one of the best means of discharging that trust is by providing funds for improving and extending the opportunities for study and research in our country; and having full confidence in the gentlemen after named, who have at my request signified their willingness to carry out the trust which I have confided to them, therefore I have transferred to these, the trustees of the Carnegie Institution of Washington, ten millions of registered five per cent bonds of the United States Steel Corporation, the names of said trustees being as follows:

[Here follow the names of the trustees as given above.]

¹Grover Cleveland, former President of the United States, was chosen one of the original trustees, but was not able to accept the appointment.

The said gift is to be held in trust for the purposes hereinafter named or referred to; that is to say, for the purpose of applying the interest or annual income to be obtained from the said bonds, or from any other securities which may be substituted for the same, for paying all the expenses which may be incurred in the administration of the trust by the trustees, including in said expenses the personal expenses which the trustees may incur in attending meetings or otherwise in carrying out the business of the trust; and, second, for paying the sums required by the said trustees to enable them to carry out the purposes hereafter expressed. I hereby confer on the trustees all the powers and immunities conferred upon trustees under the law, and without prejudice to this generality the following powers and immunities, viz: Power to receive and realize the said bonds and the principal sums therein contained and the interest thereof; to grant discharges or receipts therefor; to sell the said bonds, either by public sale or private bargain, at such prices and on such terms as they may deem reasonable; to assign or transfer the same; to sue for payment of the principal sums or interest; to invest the sums which from time to time may be received from the said bonds on such securities as trustees are authorized by the laws of the States of New York, Pennsylvania, or Massachusetts, to invest trust funds; and also on such other securities as they in the exercise of their own discretion may select, and to alter or vary the investments from time to time as they may think proper.

And I hereby expressly provide and declare that the trustees shall to no extent and in no way be responsible for the safety of the said bonds, or for the sums therein contained, or for the securities upon which the proceeds of the said bonds may be invested, or for any depreciation in the value of the said bonds or securities, or for the honesty or solvency of those to whom the same may be entrusted, relying, as I do, solely on the belief that the trustees herein appointed, and their successors, shall act honorably.

And I further hereby empower the trustees to administer any other funds or property which may be donated or bequeathed to them for the purposes of the trust; and I also empower them to appoint such officers as they may consider necessary for carrying on the business of the trust, at such salaries or for such remuneration as they may consider proper, and to make such arrangements and lay down from time to time such rules as to the signature of deeds, transfers, agreements, cheques, receipts, and other writings as may secure the safe and convenient transaction of the financial business of the trust. The committee shall have the fullest power and discretion in dealing with the income of the trust, and expending it in such manner as they think best fitted to promote the objects set forth in the following clauses.

The purposes of the trust are as follows, and the revenues therefrom are to be devoted thereto:

It is proposed to found in the city of Washington an institution which, with the cooperation of institutions now or hereafter established there or elsewhere, shall, in the broadest and most liberal manner, encourage investigation, research, and discovery; show the application of knowledge to the improvement of mankind; provide such buildings, laboratories, books, and apparatus as may be needed, and afford instruction of an advanced character to students properly qualified to profit thereby.

Among its aims are these:

1. To promote original research, paying great attention thereto as one of the most important of all departments.

2. To discover the exceptional man in every department of study whenever and wherever found, inside or outside of schools, and enable him to make the work for which he seems specially designed his life work.

3. To increase facilities for higher education.

4. To increase the efficiency of the universities and other institutions of learning throughout the country by utilizing and adding to their existing facilities and aiding teachers in the various institutions for experimental and other work in these institutions as far as advisable.

5. To enable such students as may find Washington the best point for their special studies to enjoy the advantages of the museums, libraries, laboratories, observatory, meteorological, piscicultural, and forestry schools, and kindred institutions of the several departments of the Government.

6. To ensure the prompt publication and distribution of the results of scientific investigation, a field considered highly important.

If in any year the full income of the trust can not be usefully expended or devoted to the purposes herein enumerated, the committee may pay such sums as they think fit into a reserve fund, to be ultimately applied to those purposes or to the construction of such buildings as it may be found necessary to erect in Washington.

The specific objects named are considered most important in our day, but the trustees shall have full power, by a majority of two-thirds of their number, to modify the conditions and regulations under which the funds may be dispensed, so as to secure that these shall always be applied in the manner best adapted to the changed conditions of the time; provided always that any modifications shall be in accordance with the purposes of the donor, as expressed in the trust, and that the revenues be applied to objects kindred to those named, the chief purpose of the founder being to secure, if possible, for the United States of America leadership in the domain of discovery and the utilization of new forces for the benefit of man.

In witness whereof I have subscribed these presents, consisting of what is printed or typewritten on this and the preceding seven pages, on [twenty-eighth] day of [January], nineteen hundred and two, before these witnesses.

ANDREW CARNEGIE.

JANUARY 28, 1902.

Witnesses:

LOUISE WHITFIELD CARNEGIE.

ESTELLE WHITFIELD.

REMARKS OF MR. CARNEGIE ON PRESENTING HIS TRUST DEED.

Mr. Chairman and members of the board of trustees:

I beg first to thank you for so promptly and so cordially coming forward to aid me in this work by the acceptance of trusteeship. The President of the United States writes me in a note of congratulation, "I congratulate you especially upon the character, the extraordinarily high character, of the trustees." These are his words. I believe that that estimate has been generally approved throughout the wide boundaries of our country.

May I say to you that my first idea while I dwelt upon the subject during the summer in Scotland was that it might be reserved for me to fulfill one of Washington's dearest wishes—to establish a university in Washington. I gave it careful study when I returned and was forced to the conclusion that if he were with us here to-day his finely balanced judgment would decide that such, under present conditions, would not be the best use of wealth. It was a tempting point suggested to me by the president of the Women's George Washington Memorial Association, that the George Washington Memorial University, founded by Andrew Carnegie, would link my name with Washington. Well, perhaps that might justify such association with Washington, and perhaps it is reserved for some other man in the future to win that unique place, because if we continue to increase in population as we have done it is not an improbability that it may

become a wise step to fulfill Washington's wish. But while that may justify the association of any other name with his, which is a matter of doubt, still I am very certain nothing else would. A suggestion that this gift of mine, which has its own field, which has nothing to do with the university except as an aid to one, if it is established, which has a field of its own, that is entitled to the great name of Washington, is one which I never for a moment could consider. If the coming university under the control of the nation—as Washington suggested a national institution—is to be established, as it may be in the future, I think the name of Washington should be reserved for that and for that alone. Be it our opportunity in our day and generation to do what we can to extend the boundaries of human knowledge by utilizing existing institutions.

This is intended to cooperate with all existing institutions, because one of the objections—the most serious one which I could not overcome when I was desirous to establish a university here to carry out Washington's idea—was this: That it might tend to weaken existing institutions, while my desire was to cooperate with all kindred institutions and to establish what would be a source of strength to all of them and not of weakness, and therefore I abandoned the idea of a Washington university or anything of a memorial character.

Gentlemen, a university worthy of Washington, or a memorial worthy of Washington, is not one costing \$1,000,000, or \$10,000,000, or \$20,000,000, but of more. When I contemplated a university in Washington in fulfillment of Washington's great wish, I set aside a larger amount than the largest of these. I take it for granted that no one or no association would think of using the revered name of Washington except for a university of first-class rank, something greater and better, if I may be allowed to say so, than we have in our land to-day—and you all know the sums which are now used for our universities.

Gentlemen, your work now begins; your aims are high, you seek to expand known forces, to discover and utilize unknown forces for the benefit of man. Than this there can scarcely be a greater work. I wish you abundant success, and I venture to prophesy that through your efforts, in cooperation with kindred societies, our country's contributions through research and in the domain of the higher sciences in which we are now so woefully deficient, will compare in the near future not unfavorably with those of any other land.

Again, gentlemen, from my heart, I thank you, and I will now, with your permission, read the deed of trust which has been prepared. I may say that the intended officers of this institution have a letter from my cashier, stating that the transferred bonds will be sent you early in February. They can not be transferred until the first of the month. They begin to bear interest on the 1st day of February. Here is the deed of trust. (Printed on pages 1068-1070.)

There is nothing so important, I think, as the last clause. This clause follows the deed given to the Scotch universities, in the main. When I proposed it in committee the chairman said he did not know about assuming so much responsibility as a trustee, and several gentlemen also suggested that it was too liberal, and threw too much responsibility upon them. Mr. Arthur Balfour was one of these, and I replied to him that my experience was that it is not without the greatest difficulty we can find men who can legislate for their own generation, and sometimes we are not quite successful even in doing that; but, I asked, "Have you ever seen or heard of a body of men wise enough to be able to legislate for the next generation?" He said, "No, I never have; and you are quite right, and that is the wisest provision I have ever heard of in a trust deed."

I have nothing more to say to you, gentlemen, having already expressed my thanks; but as I began with doing this I feel that I should also like to end doing so, and, therefore, I thank you again.

OFFICERS.

President of the Carnegie Institution: Daniel C. Gilman.

Chairman of the board of trustees: Abram S. Hewitt.

Vice-chairman of the board of trustees: John S. Billings.

Secretary of the board of trustees: Charles D. Walcott.

Executive committee: John S. Billings, Daniel C. Gilman, Abram S. Hewitt, S. Weir Mitchell, Elihu Root, Charles D. Walcott, Carroll D. Wright.

The office of the Carnegie Institution is in Washington, D. C., at No. 1439 K street, where an assistant secretary, Mr. Marcus Baker, is in charge.

CARNEGIE INSTITUTION,
1439 K Street, Washington, D. C.

A LETTER TO THE HEADS OF AMERICAN INSTITUTIONS AND TO OTHERS INTERESTED
IN THE WORK OF INVESTIGATION.

The Carnegie Institution sends to you herewith a copy of Mr. Carnegie's deed of gift and other information in respect to the organization of the new foundation.

Some of the ablest thinkers and investigators in the country have already called attention to important lines of inquiry. Their communications will be referred to special committees in different departments of knowledge—astronomical, physical, chemical, biological, geological, archæological, philological, historical, bibliographical, economical, etc., and the referees will be requested to add their own suggestions and to report to the Carnegie Institution such methods of procedure and the names of such investigators as they deem likely to advance with wisdom the great purpose of the foundation.

No large appropriations can be made at present, as there will be no income from the fund before August. The summer will be chiefly devoted to a careful study of the problems of scientific investigation at home and abroad, and in the autumn definite plans of procedure will be formulated.

Any member of the executive committee will be glad to receive from you at any time suggestions, opinions, and advice as to fields that the Carnegie Institution ought to occupy and the best methods for carrying forward its work in those fields; but in order that important papers, designed for official consideration, may be properly recorded and filed, they should be addressed to the president of the Carnegie Institution, 1439 K street, Washington, D. C.

DANIEL C. GILMAN, *Chairman*.
CHARLES D. WALCOTT, *Secretary*.
JOHN S. BILLINGS,
ABRAM S. HEWITT,
S. WEIR MITCHELL,
ELIHU ROOT,
CARROLL D. WRIGHT,
Executive Committee.

THE CARNEGIE INSTITUTION.

AN AUTHORITATIVE STATEMENT BY PRESIDENT GILMAN.¹

Not many months ago Mr. Andrew Carnegie surprised the universities of Scotland by a gift of \$10,000,000 for the encouragement of deserving students. He has now surprised the learned institutions of America by a gift of the same

¹ Reprinted from the Century Magazine, March, 1902.

amount for the advancement of knowledge. As this open letter is written, he has not formally made his deed of gift, and the trustees whom he selected have not developed their plans; but enough is definitely known to awaken the highest expectations of good, and to call for the enthusiastic reception of his great project. His general purpose has been clearly stated in a single sentence. He purposes to found, in the city of Washington, in the spirit of Washington, an institution which, with the cooperation of institutions now or hereafter established, there or elsewhere, shall, in the broadest and most liberal manner, encourage investigation, research, and discovery; show the application of knowledge to the improvement of mankind; provide such buildings, books, and instruments as may be needed, and afford instruction of an advanced character to students whenever and wherever found, qualified to profit thereby.

A more complete announcement of Mr. Carnegie's plan is given in this informal statement:

Among its aims are these:

To increase the efficiency of the universities and other institutions of learning throughout the country by seeking to utilize and add to their existing facilities, and to aid teachers in the various institutions for experimental and other work in these institutions as far as practicable.

To discover the invaluable and exceptional man in every department of study, whenever and wherever found, inside or outside of the schools, and enable him by financial aid to make the work for which he seems specially designed his life work.

To promote original research, paying great attention thereto, as being one of the chief purposes of this institution.

To increase facilities for higher education.

To make more useful, to such students as may find Washington the best point for their special studies, the museums, libraries, laboratories, observatory, meteorological, piscicultural, and forestry schools, and kindred institutions of the several departments of the Government.

To insure the prompt publication and distribution of the results of scientific investigation, a field considered to be highly important.

These and kindred objects are to be attained by the employment of able teachers in the various institutions in Washington or at other points, and by enabling men fitted for special work to devote themselves to it, through salaried fellowships or scholarships, or through salaries carrying pensions in old age, or through aid in other forms to such men as continue their special work at seats of learning or who may be discovered outside the schools.

The present moment is favorable for casting the eye backward over the growth of an idea, and for tracing the various influences which have contributed to its evolution. A small amount of that "original research," which is the dominant note of the scientific world, will show the relation of George Washington to this new movement.

The possible establishment of a national university was brought up in the Constitutional Convention, and was seriously discussed; but the project was dropped, and no mention of it is found in the fundamental law of the Union. When Washington became President he used this language in his first message to Congress, January 8, 1790:

There is nothing which can better deserve your patronage than the promotion of science and literature. * * * Whether this desirable object will be best promoted by affording aids to seminaries of learning already established, by the institution of a national university, or by any other expedients, will be well worthy of a place in the deliberations of the legislature.

From that time onward until he drew up his last will, a few months before he died, Washington frequently recurs to his wishes. "The University of the Federal City" is repeatedly spoken of. At the beginning of the year 1795 he points out the advantages of the "Federal City" as a site for a university, and says if the plan is adopted he will give to it 50 shares of the Potomac River Company.

He adds, however, that the design has assumed no form, and that he does not know who is promoting it. A little later he addresses Mr. Jefferson on the same subject, and gives these reasons for preferring the Federal City for his proposed gift: It will be the seat of government; it is central; half the District of Columbia is in Virginia; there will be an advantage in governmental supervision, and certain studies in law and politics can be favorably pursued in the neighborhood of Congress. He speaks also of his own gift as a part of the endowment. In 1796 a memorial was presented to Congress for the foundation of a national university, but nothing came of it. Finally, in the will of Washington we have the following paragraph, which, like the famous paragraphs that constitute the Monroe doctrine, is very short, and has been the basis of much discussion in later years:

* * * as it has always been a source of serious regret with me to see the youth of these United States sent to foreign countries for the purpose of education, often before their minds were formed, or they had imbibed any adequate ideas of the happiness of their own; contracting too frequently not only habits of dissipation and extravagance, but principles unfriendly to republican government, and to the true and genuine liberties of mankind, which thereafter are rarely overcome; for these reasons it has been my ardent wish to see a plan devised on a liberal scale, which would have a tendency to spread systematic ideas through all parts of this rising empire, thereby to do away local attachments and State prejudices, as far as the nature of things would, or, indeed, ought to admit, from our national councils. Looking anxiously forward to the accomplishment of so desirable an object as this is (in my estimation), my mind has not been able to contemplate any plan more likely to effect the measure than the establishment of a university in a central part of the United States, to which the youths of fortune and talents from all parts thereof might be sent for the completion of their education, in all the branches of polite literature, in arts and sciences, in acquiring knowledge in the principles of politics and good government, and as a matter of infinite importance, in my judgment, by associating with each other, and forming friendships in juvenile years, be enabled to free themselves in a proper degree from those local prejudices and habitual jealousies which have just been mentioned, and which, when carried to excess, are never-failing sources of disquietude to the public mind, and pregnant of mischievous consequences to this country.

Whatever may have been the source of Washington's idea, it was not a passing thought, for his recorded commendations of it cover nearly ten years. But there was little public discussion of the subject for nearly three quarters of a century, although it was repeatedly mentioned in Presidential messages. At length, in 1873, a member of Congress, the Hon. John W. Hoyt, of Wisconsin, afterwards governor of Wyoming, brought the subject forward, and from that time to this he has been the unselfish, undaunted, and persistent advocate of a national university to be organized and endowed by Congress. In spite of the opposition and coldness which the project has encountered, he has lost no opportunity to urge its importance; he has never lost his zeal and confidence. Eminent members of the National Legislature have introduced the appropriate bills, and yet no final action has been taken by Congress: The support of distinguished men in every part of the country has been secured, and yet, at the same time, strong objections have been raised in various quarters. Many wise and patriotic persons have been apprehensive that Congress would not be, as years roll by, the best supporter of advanced education, and others have thought that the country already had more than enough institutions exercising the university functions.

Recently other influences have been at work. Many persons who admire the management of the Smithsonian Institution have thought it desirable that the work of that establishment should be so enlarged as to exercise, in part at least, the functions of a university; but the authorities of the Smithsonian have not seen the way clear to any such expansion. Many of those who are connected with the scientific bureaus of the Government became aware of the great resources of Washington which might be opened to students properly qualified to profit by them, and probably at their suggestion Congress consented to the

opening of these resources to those who might be enrolled in the institutions of the District of Columbia. Five institutions in the District are called universities—the Georgetown University, under the Jesuit fathers; the Columbian University, controlled by the Baptists; the Howard University, for the instruction of Africans; the Catholic University, chartered by the Pope and fostered by the Roman Catholic prelaty; and the American University, projected by the Methodists. This simple enumeration shows how divergent have been the wishes and aims of those citizens who have agreed with Washington that the Federal City offered exceptional advantages for advanced instruction.

Another factor has entered into this complex problem. Many influential and patriotic ladies in different parts of the country have formed the George Washington Memorial Association, and, among other objects, have undertaken to collect a fund which might be applied to the erection in Washington of a memorial building in honor of Washington, to be used as a central, administrative building for the national university, if such an institution should come into existence.

Just before adjournment, in the summer of 1901, Congress authorized the opening of the scientific bureaus and libraries of Washington to students from any part of the country. This was an opportunity which was immediately seized by the Washington Academy of Sciences and by the George Washington Memorial Association, just referred to, and they united their forces in the establishment of an independent body to be known as the Washington Memorial Institution. This movement received the support of a large number of the presidents of colleges throughout the land, and in the autumn of 1901 everything looked favorable for the beginning of its work, except the lack of funds. In a private way some efforts were made to secure, if not an endowment, a sufficient income to carry on the work of the new organization.

Then came a great surprise. Mr. Carnegie announced his desire to found an institution in the city of Washington upon the plan already indicated at the beginning of this letter, and those whom he has selected for this work are about to proceed to the unfolding of his purposes.

The form of organization is very simple. Under the general law of the District of Columbia six persons, namely, Messrs. John Hay, Edward D. White, John S. Billings, Charles D. Walcott, Carroll D. Wright, and Daniel C. Gilman, formed an incorporation at Mr. Carnegie's request, and subsequently, on his nomination, selected twenty-seven persons to be the trustees, namely: The President of the United States, the President of the United States Senate, the Speaker of the House of Representatives, the Secretary of the Smithsonian Institution, the president of the National Academy of Sciences, *ex officio*; Grover Cleveland, John S. Billings, William N. Frew, Lyman J. Gage, Daniel C. Gilman, John Hay, Abram S. Hewitt, Henry L. Higginson, Henry Hitchcock, Charles L. Hutchinson, William Lindsay, Seth Low, Wayne MacVeagh, D. O. Mills, S. Weir Mitchell, W. W. Morrow, Elihu Root, John C. Spooner, Andrew D. White, Edward D. White, Charles D. Walcott, and Carroll D. Wright.

It is obvious that a body like this, which is made up of men whose homes are in widely scattered parts of the country, and who are evidently selected because of the interest they have shown in the welfare of the country, can not manage the details of scientific investigation. They will doubtless select certain executive officers, but even these will not be qualified, without a great deal of expert advice, to determine the value of the various methods of procedure which will quickly be presented for their consideration. Accordingly, the next step forward will be to appoint a number of counselors or experts, to whom will be referred important questions of a scientific character, the selection of competent helpers, and the best methods of publishing results. It is proposed, in other words, to select, in different departments of knowledge, men who by their ability and experience have

shown themselves worthy of confidence. They will constitute the scientific corps of the institution, and will be chosen because they are qualified and willing to cooperate in advancing the purposes of the institution.

It is noteworthy that Mr. Carnegie's gift does not supersede any action on the part of Congress to establish a university, in the ordinary sense of that word, where a faculty shall be assembled, laboratories provided, and post-graduate students admitted. All the plans thus far projected for a national university have looked toward post-graduate work, extending the opportunities now provided in colleges and other institutions throughout the land. This form of activity is foreign to Mr. Carnegie's purposes, and his purposes can be carried out with or without the establishment of a national university by Congress. That question stands now, as heretofore, on its own merits.

The friends of scientific research will await the further development of the Carnegie Institution with profound interest. Even those who would prefer the organization of a national university supported by Congress must perceive upon reflection, if they do not at the outset, that Mr. Carnegie's plans are as broad as the field of knowledge, that the amount of his gift surpasses any other endowment in the world for the specific purpose of extending science, and that the spirit of cooperation which he enjoins upon his trustees must bring the new institution into close affiliation with all that is best in the country. He will deserve not only the applause but also the gratitude of mankind.

DANIEL C. GILMAN.

OBJECT AND PURPOSE OF THE INSTITUTION.

STATEMENT BY PRESIDENT GILMAN IN THE INDEPENDENT, MARCH, 20, 1902.

A brief definition of the object and purpose of the Carnegie Institution is the advancement of knowledge. This is its chief aim, and the efforts of those who have been selected to frame its policy will be directed accordingly. It will occupy a distinct position in the field of education, interfering in no way with the plans of other organizations. We trust that it will prove a new and powerful agency for the promotion of science in this country.

Those who have been appointed to formulate plans will devote ample time to a careful consideration of all the possibilities. If it is deemed advisable to erect a building or series of buildings, they will be constructed, but the procedure is not likely to be immediate. The question of aiding students who are deserving of such assistance will be thoroughly discussed, but if any decision is reached in the affirmative our plans will in no way conflict with those of the Washington Memorial Institution, which has this as one of its principal purposes. Our activity may include cooperation with the highest universities or with schools comparatively obscure. Not only are the suggestions of eminent educators invited, but we look for assistance from all persons who have ideas of value. Diligent inquiry is to be made respecting existing agencies of research. We know where valuable data exist, but may discover new sources as the inquiry progresses.

As a preliminary study I expect to visit various institutions in this country so as to confer personally as far as possible with those who may be in a position to aid us. Later I shall spend some time abroad with the same object in view. In short, we intend to draw upon the world at large for counsel and suggestions which may be of assistance in formulating a plan.

For the present, the affairs of the Carnegie Institution are in the hands of an executive committee, appointed by the board of trustees, consisting of Abram S. Hewitt; Carroll D. Wright; Dr. John S. Billings; Charles D. Walcott; Elihu Root, Secretary of War; Dr. S. Weir Mitchell, and the President. We have rented a

dwelling in Washington for temporary headquarters. While the board of trustees are given authority by the founder to complete the organization and formulate the policy to be pursued, I have no doubt that if we should call upon him for advice or other assistance it would be gladly given. * * *

EDUCATIONAL BENEFACTIONS OF ANDREW CARNEGIE.

The following is a list (compiled from Appleton's Annual Cyclopedias) of the most notable gifts of money by Andrew Carnegie for libraries and other educational purposes in the United States:

Object or institution.	Location.	Amount.
1895. Public library and art gallery	Pittsburg, Pa	\$1,000,000
1898. Library, music hall, and clubhouse (for employees of Carnegie Steel Co.). Virginia Mechanics' Institute (to complete Ginter Memorial Building).	Richmond, Va	300,000 10,000
Total for 1898		310,000
1899. Carnegie Institute (for enlarging building). Cooper Union (for mechanics' day art school). Public library	Pittsburg, Pa	1,750,000
Do	New York, N. Y	300,000
Do	Washington, D. C	350,000
Do	Atlanta, Ga	125,000
Do	Lincoln, Nebr	75,000
Do	McKeesport, Pa	50,000
Do	Connellsville, Pa	50,000
Do	Steubenville, Ohio	50,000
Do	East Liverpool, Ohio	50,000
Do	Fort Worth, Tex	50,000
Do	Emporia, Kans	50,000
Do	Davenport, Iowa	50,000
Do	Cheyenne, Wyo	50,000
Do	Austin, Tex	50,000
Do	San Diego, Cal	50,000
Do	Duluth, Minn	50,000
Pennsylvania State College (for library building)	State College, Pennsylvania.	100,000
Stevens Institute of Technology (for laboratory building).	Hoboken, N. J	50,000
Mechanics' Institute	New York, N. Y	25,000
Public library	Newport, Ky	20,000
Do	Tucson, Ariz	25,000
Virginia Mechanics' Institute (for new building)	Richmond, Va	10,000
New York Zoological Society (for building fund)		5,000
Public library	Erie, Pa	5,000
Total for 1899		3,870,000
1900. Carnegie Library and Institute (additional)	Pittsburg, Pa	1,850,000
Polytechnic Institute	do	3,000,000
Public library	East Orange, N. J	50,000
Do	York, Pa	50,000
Library	Fort Dodge, Iowa	30,000
Do	Leavenworth, Kans	25,000
Do	Chillicothe, Mo	25,000
Tuskegee Normal and Industrial Institute	Tuskegee, Ala	20,000
Stevens Institute of Technology (additional).	Hoboken, N. J	15,000
Total for 1900		5,085,000
1901. Technical School ¹	Pittsburg, Pa	2,000,000
Carnegie Institution	Washington, D. C	10,000,000
Sixty-five branch libraries	Greater New York, N. Y	5,200,000
Annuity fund for laborers	Homestead, Pa	4,000,000
Libraries	Braddock, Homestead, and Duquesne, Pa.	21,000,000
Carnegie Institute	Pittsburg, Pa	1,000,000
Library and branches	Detroit, Mich	750,000
Do	San Francisco, Cal	750,000
Cooper Union	New York, N. Y	500,000
Syracuse library	Syracuse, N. Y	200,000

¹ Promised endowment, \$25,000,000.

² In addition to previous gifts.

Object or institution.	Location.	Amount.
1901.		
Upper Iowa University	Fayette, Iowa.....	\$225,000
Library	Seattle, Wash.....	200,000
Bellevue Medical College.....	New York, N. Y.....	70,000
Carnegie Laboratory.....	do.....	50,000
College.....	Aurora, Ill.....	50,000
Knox College (library).....	Galesburg, Ill.....	50,000
Cornell College (library).....	Mount Vernon, Iowa.....	40,000
Botanical Gardens.....	New York, N. Y.....	30,000
Society of Mechanics and Tradesmen	do.....	25,000
Observatory.....	Allegheny, Pa.....	20,000
Library.....	Atlanta, Ga.....	120,000
Young Men's Hebrew Association	New York, N. Y.....	5,000
Educational Alliance.....	do.....	2,500
Library.....	Abbeville, S. Dak.....	15,000
Do.....	Alameda, Cal.....	55,000
Do.....	Ashtabula, Ohio.....	15,000
Do.....	Aurora, Ill.....	50,000
Do.....	Austin, Minn.....	12,000
Do.....	Beloit, Wis.....	25,000
Do.....	Burlington, Vt.....	50,000
Do.....	Canandaigua, N. Y.....	10,000
Do.....	Canton, N. Y.....	30,000
Do.....	Canton, Ohio.....	50,000
Do.....	Carbondale, Pa.....	25,000
Do.....	Carrollton, Ill.....	10,000
Do.....	Catskill, N. Y.....	20,000
Do.....	Cedar Rapids, Iowa.....	75,000
Do.....	Centralia, Ill.....	15,000
Do.....	Charleston, Ill.....	18,000
Do.....	Charlotte, N. C.....	20,000
Do.....	Charlottesville, Va.....	20,000
Do.....	Chatham, N. Y.....	15,000
Do.....	Chattanooga, Tenn.....	50,000
Do.....	Clinton, Mass.....	25,000
Do.....	Clinton, Iowa.....	30,000
Do.....	Cohoes, N. Y.....	25,000
Do.....	Conneaut, Ohio.....	100,000
Do.....	Covington, Ky.....	75,000
Do.....	Crawfordsville, Ind.....	25,000
Do.....	Davenport, Iowa.....	75,000
Do.....	Decatur, Ill.....	60,000
Do.....	Elkhart, Ind.....	30,000
Do.....	Elwood, Ind.....	25,000
Do.....	Fargo, N. Dak.....	20,000
Do.....	Fort Scott, Kans.....	15,000
Do.....	Fort Wayne, Ind.....	75,000
Do.....	Freeport, Ill.....	30,000
Do.....	Fresno, Cal.....	30,000
Do.....	Galesburg, Ill.....	50,000
Do.....	Gloversville, N. Y.....	25,000
Do.....	Goshen, Ind.....	25,000
Do.....	Grand Junction, Colo.....	5,000
Do.....	Great Falls, Mont.....	30,000
Do.....	Greenbay, Wis.....	25,000
Do.....	Greenville, Ohio.....	25,000
Do.....	Griffins Corners, N. Y.....	5,000
Do.....	Grosedale, Ill.....	35,000
Do.....	Hawarden, Iowa.....	5,000
Do.....	Hempstead, L. Isl., N. Y.....	25,000
Do.....	Henderson, Ky.....	25,000
Do.....	Iron Mountain, Mich.....	15,000
Do.....	Ishpeming, Mich.....	20,000
Do.....	Islip, N. Y.....	10,000
Do.....	Jackson, Mich.....	50,000
Do.....	Jackson, Tenn.....	50,000
Do.....	Jacksonville, Ill.....	40,000
Do.....	Janesville, Wis.....	50,000
Do.....	Johnstown, N. Y.....	20,000
Do.....	Joplin, Mo.....	40,000
Do.....	Kansas City, Mo.....	75,000
Do.....	Kent, Ohio.....	10,000
Do.....	Kewanee, Ill.....	50,000
Do.....	Lawrence, Kans.....	25,000
Do.....	Leadville, Colo.....	100,000
Do.....	Leviston, Me.....	50,000
Do.....	Lincoln, Ill.....	25,000
Do.....	Los Gatos, Cal.....	10,000
Do.....	McKees Rocks, Pa.....	20,000
Do.....	Macon, Ga.....	20,000
Do.....	Madison, Ind.....	20,000
Do.....	Mankato, Minn.....	40,000
Do.....	Marion, Ind.....	50,000
Do.....	Mattoon, Ill.....	20,000

¹ In addition to previous gifts.

Object or institution.	Location.	Amount.
1901.		
Library.....	Miles City, Mont.....	\$10,000
Do.....	Moline, Ill.....	37,000
Do.....	Montclair, N. J.....	50,000
Do.....	Montgomery, Ala.....	50,000
Do.....	Mount Vernon, N. Y.....	35,000
Do.....	Muncie, Ind.....	50,000
Do.....	Nashville, Tenn.....	100,000
Do.....	Neenah, Wis.....	10,000
Do.....	Newcastle, Pa.....	30,000
Do.....	New Rochelle, N. Y.....	25,000
Do.....	Niagara Falls, N. Y.....	50,000
Do.....	Norfolk, Va.....	50,000
Do.....	Norwalk, Conn.....	20,000
Do.....	Oil City, Pa.....	40,000
Do.....	Paducah, Ky.....	35,000
Do.....	Pekin, Ill.....	10,000
Do.....	Pensacola, Fla.....	15,000
Do.....	Perth Amboy, N. J.....	20,000
Do.....	Peru, Ind.....	35,000
Do.....	Portland, Ind.....	15,000
Do.....	Portsmouth, Ohio.....	50,000
Do.....	Racine, Wis.....	50,000
Do.....	Revere, Mass.....	20,000
Do.....	Richmond, Va.....	100,000
Do.....	Riverside, Cal.....	20,000
Do.....	Rockford, Ill.....	60,000
Do.....	St. Cloud, Minn.....	25,000
Do.....	San Jose, Cal.....	50,000
Do.....	San Juan, P. R.....	100,000
Do.....	Sault Sainte Marie, Mich.....	30,000
Do.....	Schenectady, N. Y.....	50,000
Do.....	Sharon, Pa.....	25,000
Do.....	Sheboygan, Wis.....	25,000
Do.....	Sioux Falls, S. Dak.....	25,000
Do.....	South Omaha, Nebr.....	60,000
Do.....	South St. Joseph, Mo.....	25,000
Do.....	Springfield, Ill.....	75,000
Do.....	Stillwater, Minn.....	25,000
Do.....	Superior, Wis.....	50,000
Do.....	Tacoma, Wash.....	75,000
Do.....	Valley City, N. Dak.....	15,000
Do.....	Wabash, Ind.....	20,000
Do.....	Walpole, Mass.....	15,000
Do.....	Washington, Ind.....	20,000
Do.....	Waukegan, Ill.....	25,000
Do.....	Wheeling, W. Va.....	75,000
Do.....	Yonkers, N. Y.....	50,000
Total for 1901.....		39,243,500

SUMMARY.

Year.	Amount.	Year.*	Amount.
1895.....	\$1,000,000	1901.....	\$39,243,500
1898.....	310,000		
1899.....	3,370,000	Total.....	39,583,500
1900.....	5,065,000		

*The total value of the n. notable gifts and bequests for public purposes of \$5,000 and upward made during the year 1901, as given in Appleton's Annual Cyclopaedia, and including the above amount given by Mr. Carnegie, was \$114,549,789. This sum excludes ordinary denominational contributions for education and benevolent purposes, State and municipal appropriations to public and sectarian institutions, and the grants of Congress.

THE CARNEGIE GIFT TO THE UNIVERSITIES OF SCOTLAND.

The following statement shows in detail the character and purpose of the recent gift of Mr. Carnegie to promote higher education in Scotland:

The executive committee of the newly constituted Carnegie trust for university education in Scotland held its first meeting in Edinburgh on Monday, Lord Elgin presiding. The following letter from Mr. Carnegie was read:

“LONDON, June 7, 1901.

“MY DEAR LORD ELGIN: It is with the greatest satisfaction I can now announce that I have signed the deed of trust placing \$10,000,000 under the charge of your

lordship and other noblemen and gentlemen who have so kindly consented to act as trustees in the administration of the money for the benefit of the universities of Scotland and the youth of that country who desire the benefits of a university education. I must express my warmest thanks to your lordship and the other friends who have, during these past few days, shown so much anxiety to adjust the deed and the relative constitution, so as to secure that the funds shall be administered in the most advantageous manner. I believe that these labors have been completely successful, and I anticipate that most excellent results will follow. I am especially obliged to your lordship for agreeing to accept the onerous post of chairman, both of the trustees and of the executive committee, and I shall trust to your proceeding to put the trust deed into execution. The services of Mr. Ross, my solicitor, are at your disposal as interim secretary, until you have an opportunity of appointing permanent officials. I shall make arrangements whereby the fees of the students to be advantaged may be paid for the ensuing session, beginning in October next. As your lordship is aware, my desire throughout has been that no capable student should be debarred from attending the university on account of the payment of fees. I believe that the conditions of applications insure the sufficient standard of merit, and I hope that the honest pride for which my countrymen are distinguished will prevent claims from those who do not require assistance, and that the invidious task of inquiring into the circumstances of each candidate need not be imposed upon the trustees. But, to further mark my personal belief and hope in this matter, I have made provision in the trust deed that the trustees may receive funds from others to be administered along with the funds placed by me. I consider this a valuable clause, believing from my own experience with young men, that some students in after life may value the privilege of repaying advances received from the trustees. Although these are free gifts, I hope the trustees will gladly welcome such repayments if offered, as this will enable such students as prefer to do so to consider the payments made on their account merely as advances which they resolve to repay, if ever in a position to do so, and that this will protect and foster the spirit of manly independence so dear to the Scot.

"Very truly, yours,

"ANDREW CARNEGIE."

Mr. Ross, solicitor, of Dunfermline, was appointed treasurer to the trust and interim secretary. It was intimated that the transfer of the bonds constituting the income of the trust had been made, and that the first dividend would be received in the autumn. Arrangements were made by the executive committee for carrying out Mr. Carnegie's wishes regarding the payment without delay of students' fees.—[School Board Chronicle, July 20, 1901, p. 84.]

The Washington Post of May 4, 1902, published a complete list of the gifts of Andrew Carnegie, as revised and approved by Mr. Carnegie himself; in this list were included gifts for other than library or educational purposes. The summary of all the gifts, according to locality, was as follows:

Canada	\$876,500
Cuba	252,000
England.....	420,000
Ireland.....	65,500
Scotland	13,078,750
United States.....	52,270,173
Miscellaneous gifts, Great Britain.....	250,000
Grand total	67,212,923

CHAPTER XXIV.

EDUCATION IN FRANCE.

France, Republic: Area, 204,002 square miles; population, 33,517,975 (1896). Civil divisions having special functions in educational administrations, departments (90 in number, including 3 in Algiers); communes, cities or villages.

PREVIOUS ARTICLES.

The educational system of France. (Report, 1888-89, Vol. 1, pp. 112-149.)

Report of the educational congresses and exhibition held in Paris, 1889. (Report, 1889-90, Vol. 1, pp. 41-186, by W. H. Widgery.)

Brief view of the educational system, with statistics for 1888-89. (Report, 1889-90, Vol. 1, pp. 249-261.)

Elementary education in London and Paris. (Ibid., pp. 263-280.)

Education in France: Statistics, 1890-91; progress of primary schools since Guizot's law, 1833; higher primary and classical schools of France. (Report, 1890-91, Vol. 1, pp. 95-124.)

Education in France: Outline of the system, and statistics for 1892; State faculties; proposed transformations and development of teaching functions. (Report, 1891-92, Vol. 1, pp. 73-95.)

Civil service in France, by W. F. and W. W. Willoughby. (Ibid., pp. 369-412.)

Education in France: Outline view, with current statistics; inspection of infant schools; recent changes in the baccalaureate; reorganization of medical studies and of the scientific course preparatory thereto. (Report, 1892-93, Vol. 1, pp. 219-237.)

Education in France: Statistics for 1891-1893; recent modifications in secondary and superior education; progress of the system of primary instruction; schools for adults; movements for the admission of American students to the universities of France. (Report, 1894-95, Vol. 1, pp. 289-312.)

Education in France: Statistics for 1894-95; summarized view of primary schools; proposed modifications of secondary institutions; the law of July 10, 1893, transforming the State faculties into universities; status of medical students in France, with special reference to foreigners; Dr. Alcée Fortier on the French lycées. (Report, 1895-96, Vol. 1, pp. 611-639.)

Education in France: Statistics, current and comparative; opening of the universities under the law of July 10, 1893; the new doctorate open to foreigners; state secondary schools *v.* church establishments; the law of July, 1893, respecting salaries of teachers of primary schools; the superior primary schools, progress, organization, and scope; M. Boutmy on the reform of the baccalaureate; M. Bréal on the study of Greek. (Report, 1896-97, Vol. 1, pp. 29-70.)

Education in France: Statistics, 1896; the decentralizing movement; the reconstruction of the universities; efforts for strengthening the moral influence of the schools; temperance instruction; manual training and technical schools; report of Mr. Charles Copland Perry on technical education in France; the admission of American students into French universities; review of the career of M. Victor Duruy, minister of public instruction, 1863-1869, by the Duc de Broglie; review of the work of M. Henri Marion, first professor of the science of education at the Sorbonne, by M. F. Buisson. (Report, 1897-98, Vol. 1, pp. 694-738.)

System of public education in France: Summarized statistics; current record of the universities organized under the law of 1893; tabular view, 1887 and 1897; admission of foreign students to French universities; the university doctorate created under decree of 1897; primary education; work of the Republic reviewed; current movements; secondary education; congress of professors; commission of inquiry; scope and proceedings. (Report, 1898-99, Vol. 1, pp. 1089-1138.)

Education at the Paris Exposition (Report, 1899-1900, Vol. 2, pp. 1661-1709.)

System of education; outline and statistical survey, current and retrospective; proposed reform of State secondary schools; public lycées and colleges for girls; universities, reorganization and recent development; the congress of primary education. (Report, 1899-1900, Vol. 1, pp. 1711-1732.)

TOPICAL OUTLINE.

Statistical summary of public and private institutions. Epitome of progress of State education under the Republic. Department of primary education; historic review of public primary

education; detailed statistics of primary education, current and retrospective; the organization of the State teaching system (University of France) and the inspectorate for primary schools. Department of secondary education: Institutions included; statistics of enrollment in secondary schools for boys; proposed reorganization of public lycées and colleges for boys; law of 1901 respecting the religious associations as affecting education; present organization of the lycée classical course; weekly time tables; classical and modern courses; statistics of lycées and colleges for girls.

Department of higher education: Institutions included in the State system; statistics of State universities; recent development, scholastic and material; admission of foreign students; motives for; degrees open to foreigners; fees for; conspectus of courses of study in the University of Paris; degrees for foreign students offered by University of Paris. Miscellaneous: Statistics of higher technical schools under other ministries than that of public instruction; international correspondence of students.

The school as a moral influence in France. Discussion of juvenile crime. Simplification of French syntax.

TABLE I.—*Statistical summary of education in France.*

Classes of institutions.	Date.	Enrollment.			Professors and teachers.			Total expenditure.
		Male.	Female.	Total.	Men.	Women.	Total.	
Infant schools (écoles maternelles), public and private (ages 2 to 6).....	1898-99.....		1 752,240	1 752,240		29,414		
Primary schools:								
Public.....	1898-99.....	² 311,623	³ 1,857,955	⁴ 1,69,578	⁵ 456,276	⁶ 449,298	⁷ 105,774	⁸ 342,803,050
Private.....		² 452,572	³ 907,119	⁴ 1,363,721	⁵ 19,963	⁶ 35,549	⁷ 46,503	
Total primary schools.....		2 794,195	2 765,104	5 559,299	467,339	484,938	452,277	
Primary normal schools (ages 16 to 19).....	1897.....	3,865	3,871	7,736				
Secondary schools:								
Public (ages 8 to 20).....	1899.....	² 35,591	³ 16,233	101,824				⁸ 4 876,218
Private (ages 8 to 20).....	1899.....	192,697		102,007				
Universities:								
Public.....	1897-98.....	27,911	871	28,782				⁸ 3 172,546
Private.....	1897-98.....			1,407				

¹ Report of M. Perreau, chairman of the Financial Committee of the Chamber of Deputies (Budget for 1901) session of 1900, p. 259.

² 1891-97.

³ Perreau, pp. 266-267.

⁴ 1896-97. Expenditure (column 9) for public primary and primary normal schools.

⁵ Perreau, pp. 69, 70.

⁶ Idem, p. 85.

⁷ State appropriation required for 1901.

The statistics tabulated above, present the salient particulars of education in France in a form convenient for reference and for comparison with corresponding particulars in other countries. What they signify as to progress in France can be understood only by comparison with an earlier date. As regards primary education such comparison is set forth in a series of retrospective tables, pp. 1038-1093, covering a period of sixty years. Here are noted only the more striking particulars of the progress in the public system since the establishment of the Republic. The policy of the Republic with respect to primary education may be said to have begun in 1878 by the passage of a law imposing upon the communes (cities and rural districts) the obligation to own their schoolhouses. To aid in the work the Government appropriated 120,000,000 francs (\$24,000,000), to be allowed one-half in appropriations, one-half as loans to the communes. Between that date and 1897, there were expended for buildings and sites 639,000,000 francs (\$137,800,000), of which \$52,000,000 were for normal schools. The expenditures of Paris and other large towns not included in the above would raise the grand total to 850,000,000

frances. In 1878 the communes owned 41,401 school buildings; in 1897, 52,879. The difference (11,478) scarcely expresses the actual increase as 8,024 of the new buildings are school groups, of which, in 1878 there were very few.

In 1877 there were 110,709 teachers in the primary schools (excluding infant schools); in 1897 the number was 153,505, an increase of 38.6 per cent (for men teachers 30.2 per cent, for women teachers 44 per cent).

In 1897 there were 818,190 more pupils enrolled in primary schools than in 1877, and during the same time the enrollment in infant schools had increased by 197,571. The great increase in school teachers and enrollment has necessitated corresponding increase in current expenditure, which rose from 94,597,554 francs (\$18,879,510) in 1887 to 214,915,259 francs (\$42,803,050) in 1897, or two and one-third-times the earlier total.

This progress in essential conditions has been accompanied by a striking extension in the scope and influence of the schools as shown by the development of higher primary schools and of evening continuation classes for youths and adults, and by a variety of social efforts (educational, recreative, and philanthropic) of which the school is the inspiring source. These developments, which belong to the later years of the Republic, will be considered presently in detail.

The higher teaching agencies, the classical schools and universities, have also been liberally fostered by the Republic. In the last twenty years the State has spent about 67,000,000 francs (\$13,400,000) in the construction and restoration of the lycées (State classical schools), and to this amount the cities have added 20,000,000 francs (\$4,000,000).

The public lycées and colleges for boys, which had 66,931 pupils in 1876, enrolled 85,591 in 1898. Since 1880, the entire work of public secondary education for girls has been created.

For the buildings alone devoted to this latter purpose, the State has advanced above 33,000,000 francs (\$6,680,000), and bears annually about 70 per cent of the current expenses, which, in 1898, amounted to 3,764,354 francs (\$752,870).

The development of university education under the Republic can be but faintly indicated by figures. The university administration has been entirely reorganized, the material resources of the universities greatly enriched, and the scheme of studies extended.

As regards students, the statistics show an increase from 17,605 in the State universities in 1878 to 28,254 in 1898, and as regards current expenditure an increase from 10,400,000 francs (\$2,080,000) to 13,860,000 francs (\$2,772,000). Since 1875 above \$2,000,000 have been expended by the State and cities in the construction of new university buildings. The total State appropriation for education (ministry of public instruction) rose in 1901 to 266,966,483 francs (\$51,393,296), of which \$31,426,215 was for primary education.

For a closer view of the work of this comprehensive system of education the three divisions (primary, secondary, and superior) must be considered separately. These are centralized under the control of the minister of public instruction (at present M. Leygues), but separately administered.

To the department of primary education (director in the ministry, M. Bayet) belong the infant schools, primary schools, elementary and higher, and primary normal schools. As shown in Table I, the State shares this work with private agencies (chiefly clerical). The relation of these two systems to each other gives peculiar interest to the educational history of France and explains the most important recent events of that history. The Republic has been forced to build itself in and through the public schools, and hence the progress outlined above can be fully comprehended only by considering the measures which have developed the national as opposed to the church system.

As a public service primary education dates from Guizot's law of 1833, passed in the brief calm of Louis Philippe's reign. The principles of public obligation and necessity which the law embodied had indeed been set forth with more passionate ardor and much wider scope by the early leaders of the French revolution; but whereas these doctrinaire projects failed of effect, save perhaps that they hastened the suppression of existing institutions, Guizot's law was practically realized. It struck to the root of the matter by localizing responsibility. Every commune was required to maintain a primary school and every department a normal school for men. The requirement was enforced by the imposition of a local school tax.

An ordinance of 1835 strengthened the work by creating a special inspectorate for primary schools, and a second ordinance (1836) made provision for the primary instruction of girls.

Under Guizot's law a communal school might be denominational, and the influence of the church was increased by giving the clergy excessive representation in the local school committees. Like the English school law of 1870, this earlier French law indicated a serious intention of overcoming gross illiteracy. At the time of its passage it was estimated that seven or eight thousand communes (about one-fourth of the whole number) were totally destitute of schools and that as many more had schools unworthy of recognition. The effects of the law were soon apparent. By reference to the retrospective table (II) it will be seen that school enrollment increased by nearly a third (31 per cent) between 1837 and 1850—two years after the fall of the restored monarchy. Schools under the charge of the religious orders multiplied even more than public secular schools. Among the former were held in special repute the schools of the Christian Brothers, which had been favored by Napoleon. The Emperor was indeed content to leave the instruction of the masses as it had been left before the revolution—to the efforts of priests and brotherhoods. Although the *petites écoles*,¹ as primary schools were designated, were nominally included under the Imperial University, they were disregarded in its practical administration.

The work that Guizot began and fostered while minister of education, a position which he held at intervals from 1832 to 1840, continued with varying fortune after the fall of the monarchy. Carnot, first minister of public instruction in the Republic of 1848, framed a law on broad lines, making primary education obligatory and free. Though practically a dead letter, it revived the ideals of the first Revolution. Under the ministry of M. de Falloux was proposed the celebrated law which bears his name, although passed under his successor March 15, 1850. It has been called the law establishing the liberty of teaching. According to M. Rambaud, it established "the monopoly of the religious orders."²

From the passage of that law up to 1875, the enrollment in secular primary schools, as will be seen by reference to Table II, increased by only 24 per cent, while the enrollment in schools of the religious orders increased by 99 per cent. Moreover, the secular schools were imbued with the church spirit, as their teachers were largely recruited from the religious orders. They differed from the independent schools simply in deriving support from public funds and being under the supervision of local committees.

The event of chief importance to education during the reign of Napoleon III was the ministry of M. Duruy. Although his efforts were chiefly directed to secondary and higher education, he secured the passage of a law (1867) which strengthened public primary education. This law made the maintenance of a separate public school for girls obligatory upon every commune having 500 or more inhabitants, improved the teachers' salaries, created continuation classes for

¹ These schools had been the subject of royal decrees in 1695 and again in 1724.

² See article "France," in Buisson's Dictionary of Pedagogics and Primary Instruction, Vol. I, Part I.

adults, and provided for the support of hamlet schools and for special aid to necessitous schools.

In the twelve years between the passage of that law and the year in which the Republic entered vigorously upon its school policy above 2,000 new schools were opened—nearly 200 a year—and of the whole number 1,580 were schools for girls. The increase in the same time in the enrollment of girls is particularly marked (Table II); for all pupils the increase was 7 per cent; for girls, 10 per cent. It is worthy also of note that a law of 1854 (the third year of the second Empire) transferred to the prefects of departments the power in respect to schools hitherto exercised by the rectors of academies. This measure, which Jules Simon denounced as a sacrifice of educational to political interests, laid the foundations for the departmental administration of primary schools, which is one of the most important features of the present system.

The French Republic was proclaimed September 3, 1870, the day after the defeat of the French army at Sedan, and on the 4th of September a cabinet was formed with Jules Simon as minister of public instruction.

The siege of Paris, the disorders of the commune, the humiliation and distractions of the country, precluded for a time any serious efforts in respect to education. Moreover, and perhaps because of the excesses of the commune, there was a temporary strengthening of ecclesiastical influences. This was shown by the laws of March 19, 1873, reorganizing the superior council of education, and by the law of July 12, 1875, upon the liberty of higher education.

The former law restored the elective principle in the formation of the council, but gave excessive representation to the clericals, while the law of 1875 operated wholly in favor of "church faculties." It was not until after the elections of 1877, which gave a Republican majority to both chambers, that education became the absorbing interest of the Government.

The course of the Government with respect to primary education was fore-had-dowed by the law of June 1, 1878, which, as noted already, created a fund of \$24,000,000 for building schoolhouses.

The year following began the memorable ministry of Jules Ferry, who is justly called the founder of the national system. His views respecting education were already well known. In 1870, after his election by a Paris district to the Chamber of Deputies, he had publicly vowed to give himself to this cause. "When this honor fell to me," he said, "I made this vow: That among all the questions, all the problems, all the necessities of the hour, I would choose one to which I would consecrate all my abilities, all my mind and heart, all my physical and moral power—this is the problem of the education of the people."

It must interest us to know that he found inspiration for his efforts in the work of our own country. He had studied this work carefully in the report of M. Hippéau, and drew from it pointed illustrations for the positions advanced in his address upon "Equality in education."¹ This address set forth very clearly the principles so effectively applied during his administration.

The first measure carried by Jules Ferry was the law of August 9, 1879, which imposed upon each department the creation of a normal school for women teachers under the same guaranties as those required by the law of 1833 for the normal schools for men. This law, with the foundation of three higher normal schools—Sèvres, Pontenay-aux-Roses, and Saint-Cloud—(the first intended for professors of girls' lycées, the last two for professors in the primary normals) completed the measures necessary to assure a teaching force thoroughly equipped and imbued with patriotic sentiment.

The law of February 14, 1880, reorganizing the superior and academic councils

¹ See *Discours sur l'égalité d'éducation; Discours et opinions de Jules Ferry*, Vol. I, pp. 234-305.

of public instruction, made a radical change in the administrative service. These councils were a survival from the university or State teaching monopoly created by Napoleon. Under his system the councils were formed by appointment, and reflected simply his arbitrary will. Their constitution had been modified in the years between the fall of the first Empire and the establishment of the second Republic, but never to the extent of making them essentially professional councils for the fostering of public education.

In his exposé of motives accompanying the measure of 1830 the minister declared that heretofore the representatives of the public interest had been excluded as far as possible from the superior council, while its doors had been opened wide to the representatives of rival interests. Independent schools could be multiplied without limit, but the State could not open a school, found a college, or create a university professorship without the sanction of the superior council, a majority of whose members had "no connection with education and were hostile to the State system." Briefly summarized, the changes that he proposed were: (1) Exclusion of ecclesiastics and of so-called representatives of social interests; (2) admission to the council of elected representatives of secondary and primary education; (3) predominance of the elective element above the appointed or administrative.

Professional competence was the only qualification demanded in those eligible for membership. "We admit," said the minister in the discussion of the bill, "and we have proposed to admit to this council educators and only educators." Of the 69 members that made up the council, 13 were to be appointed—viz, 9 representing the State teaching system and 4 the independent agencies. Thus the State authority was made supreme. The same principles of professional qualification and election were applied in the reconstitution of the academy councils, but with modifications required by their local relations.

This measure was followed March 18, 1830, by the passage of a law relative to the liberty of higher education. Its most important provisions were: (1) That restoring to the State the sole right to confer degrees; (2) forbidding the use of the name university by any independent body; (3) requiring special sanction upon proof of public utility for the opening of any private establishment for higher education. This law, like those of December 21, 1830, establishing public colleges (*lycées*) for girls, and July 21, 1831, creating the normal school for professors of these colleges, had no direct relation to primary education, but they deserve mention here as indicating the principles and completeness of the system which Jules Ferry had in mind. He is distinguished as the founder of French primary education, but he had no thought of isolating primary education from the higher grades.

The essential principles of administration being settled, the minister gave himself up to the great work of primary education. There followed in rapid succession the laws which created a national system. These were: (1) The law of June 16, 1831, requiring all teachers, public and private, to be provided with State diplomas and doing away with the clerical letters of authorization, which had been heretofore accepted as sufficient proof of capacity for the work [teachers possessed of these letters were obliged to submit to a State examination, excepting those who had reached the age of 35 years and had been five years in the service. Even these could not be promoted until they had conformed to the law]; (2) the law of the same date making public primary schools free schools; (3) the law of March 23, 1832, secularizing the public primary schools and making it compulsory upon all parents to secure the instruction of their children [the choice of means, that is of public or private schools or home instruction, was left to the parents]; (4) the law of October 30, 1836, "the organic law of the system," which prescribed minutely all the details of the administration, inspection, and classification of primary schools, the requirements and gradation of the teaching force, the

school programmes, etc. The law also completed the secularization of the schools by a clause providing that all teachers of public schools should belong to the laity.

Five years were allowed for the application of this provision to schools for boys, but no limit was specified in respect to schools for girls. Naturally, however, a limit was assured, as no more appointments of members of religious orders were permitted. From the intense excitement aroused by this clause, it overshadowed at the time all other features of the law. Its mention naturally carries the mind forward to the recent law respecting the religious associations, which is regarded as the culmination of the policy inaugurated by M. Ferry.

To the American student of the French system the more important provisions of the law of 1886 relate to the scholastic policy and ideals which it embodied.

It secured to Republican France a uniform school administration, equally forceful in the humblest communes and the chief city; assured even to the smallest hamlet the service of an approved teacher, guided and inspired by professional superiors, secured to every child the elements of knowledge, and by a judicious flexibility of programmes opened to all a wide range of specialized instruction.

At the outset the school work derived its impetus from a few leading men—from M. Euisson, for many years the director of primary education, and from the professors of the chief normal schools, St. Cloud and Fontenay; but as the years passed the centers of influence multiplied, and to-day every departmental normal school is a power, while the inspectorate has become the propelling force of primary schools. This diffusion or multiplication of forces is the natural result of the thorough organization provided by the law of 1886. The inspectorate, which is the distinctive feature of the organization, will be considered more fully hereafter. We proceed here with the record of progress.

DETAILED STATISTICS OF PRIMARY EDUCATION.

The sources of the following statistics are: Report on primary education in the principal countries, comparative and retrospective (*la statistique de l'enseignement primaire*), presented by M. E. Levasseur to the International Institute of Statistics, 1891; the official reports of the minister of public instruction for 1891-92, 1896-97, and the reports of the chairman of the financial committee of the Chamber of Deputies for the successive years from 1897 to 1901, inclusive.

Distribution of schools.—Practically every commune in France has complied with the law as regards the establishment of public schools, and a very large proportion (97 per cent) of those having 500 inhabitants, or more, have met the requirement of a separate school for girls. The situation in 1897 in respect to these requirements was as follows:

Total number of communes.....	36,520
Number having one or more public schools.....	35,618
Number having only private schools.....	39
Number maintaining a public school with another commune.....	815
Number having no school.....	48
Communes of 500 inhabitants or more.....	18,539
Number having a public school for girls.....	17,185
Number having only private schools for girls.....	708
Number having no separate school for girls.....	646
Communes of less than 500 inhabitants having a separate school for girls..	3,601

SCHOOL ENROLLMENT.

TABLE II.—*Retrospective view of pupils in the primary schools.*

Year.	Total number of pupils. ¹	Boys.	Girls.	Pupils in schools.			
				Public.	Private.	Secular.	Belonging to religious orders.
1837	2,690,035	1,579,888	1,110,147	2,046,455	643,580		
1840	2,843,934	1,659,662	1,240,272	2,216,767	681,167		
1843	3,164,297	1,812,769	1,351,588	2,407,425	756,872	2,457,380	706,917
1847	3,539,135	2,176,079	1,354,056				
1850	3,322,423	1,793,667	1,528,756	2,601,619	720,804	2,388,627	953,796
1861	4,286,641					2,744,667	1,541,974
1863	4,936,968	2,265,756	2,070,612	3,413,830	922,538	2,725,694	1,610,764
1865	4,436,470	2,396,792	2,129,678	3,477,542	958,928	2,763,524	1,672,946
1866	4,515,967	2,343,781	2,172,186	3,537,709	978,258	2,826,670	1,695,297
1872	4,722,754	2,445,216	2,277,538	3,835,991	883,763		
1875	4,869,738	2,459,684	2,359,045	4,049,553	759,775	2,998,709	1,871,619
1876-77	4,716,935	2,400,882	2,316,053	3,823,548	893,557	2,648,582	2,068,373
1878-79	4,869,087	2,478,417	2,390,670	3,982,802	886,285	3,027,560	1,841,527
1879-80	4,949,551	2,518,401	2,431,190	4,015,097	934,494	3,144,938	1,804,653
1880-81	5,049,363	2,588,339	2,481,024	4,079,968	969,395	3,276,982	1,772,381
1881-82	5,341,211	2,708,510	2,632,701	4,359,256	981,955	3,567,861	1,773,350
1882-83	5,432,151	2,743,564	2,688,587	4,400,210	1,022,841	3,655,035	1,777,116
1883-84	5,468,381	2,759,050	2,709,631	4,421,212	1,047,469	3,701,536	1,767,085
1884-85	5,531,259	2,790,169	2,741,060	4,463,272	1,067,857	3,778,611	1,752,618
1885-86	5,585,838	2,823,964	2,761,874	4,502,059	1,083,779	3,886,826	1,749,012
1886-87	5,596,919	2,829,127	2,767,792	4,505,169	1,091,810	3,877,185	1,719,734
1887-88	5,616,510	2,837,524	2,778,986	4,492,804	1,123,616	3,901,565	1,714,945
1888-89	5,623,491	2,833,218	2,790,183	4,446,851	1,176,550	3,915,915	1,707,488
1889-90	5,601,567	2,823,877	2,777,690	4,405,543	1,196,024	3,896,790	1,704,867
1900-91	5,536,863	2,823,428	2,770,455	4,384,905	1,203,978	3,912,013	1,681,370
1891-92	5,556,470	2,805,849	2,750,621	4,281,183	1,275,287	3,900,977	1,655,493
1892-93	5,534,115	2,800,316	2,753,799	4,277,937	1,263,178	3,904,265	1,649,850
1893-94	5,548,180	2,799,089	2,749,091	4,241,912	1,306,268	3,906,219	1,641,961
1894-95	5,540,065	2,790,710	2,749,385	4,215,411	1,324,684	3,960,240	1,639,855
1895-96	5,535,511	2,788,215	2,745,206	4,199,727	1,333,784	3,888,806	1,634,705
1896-97	5,531,418	2,782,547	2,748,871	4,190,320	1,341,098	3,911,806	1,618,612
1897-98	5,535,125	2,777,739	2,757,386	4,177,590	1,357,535	3,914,352	1,620,773
1898-99	5,539,239	2,774,195	2,765,104	4,169,578	1,369,721	3,938,842	1,600,457

¹ Infant schools not included. Algiers not included prior to 1886-87.TABLE III.—*Proportion of total enrollment in different classes of primary schools at dates specified.*

Year.	Public.	Private.	Secular.	Schools of religious orders.
	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
1837	76	24		
1840	76.5	23.5		
1860	78.3	21.7	71.2	28.8
1863	78.3	21.7	62.4	37.6
1877	81	19	56	44
1881-82	81.6	18.4	66.8	33.2
1887-88	79.9	20.1	69.5	30.5
1891-92	77.1	22.9	70.1	29.9
1896-97	75.7	24.3	70.7	29.3
1898-99	75.3	24.7	71	29

From Table II it will be seen that there was a steady increase in school enrollment from 1837, when Guizot's law had borne fruit, up to 1888-89, in which year the maximum enrollment was reached. The decline in enrollment between that year and 1896-97, which for France, excluding Algiers, was a decline from 5,545,400 pupils to 5,427,211, or 2.1 per cent, is attributed to the following causes: (1) Decrease in the school population of France (ages 6 to 13), which, as shown in Table IV, amounted to 3,145, or 0.07 per cent, between the census years 1891 and 1896; (2) rapid advance of pupils in the primary schools, with the result that the leaving certificate (*certificat d'études primaires*) is obtained at an earlier age than formerly; (3) less vigorous enforcement of the obligatory school law.¹

¹ *Statistique de l'enseignement primaire (1896-97)*, pp. ciii, cv.

A slight advance in enrollment above that reported in 1886-97 is shown by the statistics for 1898-99 (a gain of 3,283 pupils for France, excluding Algiers).

Table III shows the relative enrollment in public as compared with private schools and in secular schools as compared with those belonging to religious orders, especially since the passage of the law of 1886. This law, as already stated, forbade the employment in public schools of teachers belonging to religious orders.

The decline in public-school enrollment became somewhat marked after 1889-90, or toward the end of the period assigned for the full secularization of the schools for boys.

A transfer of pupils has been going on from public and secular to private church schools, as appears from the following analysis of the enrollment at the beginning and end of the half decade covered by the last official report:

Classification of schools.	Enrollment.		Per cent of in- crease (+) or decrease (-).
	1891-92.	1893-97.	
SECULAR.			
Public:			
Boys -----	2,318,349	2,292,639	- 1.1
Girls -----	1,434,901	1,487,766	+ 3.7
Private:			
Boys -----	53,955	48,199	-10.7
Girls -----	97,772	83,202	-11.3
CLERICAL (UNDER RELIGIOUS ORDERS).			
Public:			
Boys -----	36,969	25,766	-30.3
Girls -----	490,964	384,149	-21.8
Private:			
Boys -----	366,576	415,943	+ 4.9
Girls -----	739,984	793,754	+ 8.6

The greatest falling off, it will be seen, was in public schools for boys conducted by members of religious orders. Virtually this class of schools has now disappeared. At the same time there has been a very marked decline in the corresponding class of schools for girls. The schools that have gained by the change are chiefly private schools belonging to the religious orders, though a slight gain is also noticeable in public schools for girls.

By reference to Table II, it will be seen that although there was a slight decline in the enrollment in primary schools in the decade 1893 to 1898, if the comparison be carried back to 1876 a decided increase is disclosed.

TABLE IV.—*Retrospective view of population, as shown at census dates, and ratio of enrollment in primary schools to total population.*

Year.	Total population.	Increase (+) or decrease (-).	Children between 6 and 13, inclusive.	Increase (+) or decrease (-).	Ratio to total population.	Ratio of enrollment in primary schools to total population.
		<i>Per cent.</i>		<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
1876	36,905,788		4,502,566		12.2	12.78
1881	37,672,048	+2.1	4,586,349	+1.85	12.17	13.97
1886 ¹	38,218,903	+3.55	4,729,144	+5.03	12.4	14.46
1891	38,343,192	+ .32	4,639,526	-1.89	12.1	14.49
1896	38,517,975	+ .79	4,636,381	+0.07	12.03	14.37

¹Algiers included for this and subsequent years.

In connection with the general subject of school enrollment the growing enrollment in infant schools (*écoles maternelles*), which it is optional with the communes to establish, deserves attention.

In the half decade 1891-92 to 1896-97 the number of pupils in these schools rose from 706,579 to 729,648, an increase of 1.3 per cent, while at the same time the population 2 to 6 years of age (period for attendance upon infant schools) declined by 1.6 per cent.

Enrollment in mixed schools.—The instruction of boys and girls in the same school is permitted only in communes having less than 500 inhabitants, all communes above that limit being obliged to provide a separate school for girls. In a letter on this subject, addressed to the Commissioner of Education, M. Levasseur says: "From 1892 to 1897 the number of mixed schools has increased but slightly. This is because the population of a number of small communes has diminished.

"Before 1886 many small communes possessed maternal schools (in which boys and girls are both admitted) and received State appropriations for the supply of the same.

"The law of 1886 suppressed the appropriation for all communes having less than 1,200 inhabitants. As a consequence, a number of communes of this class have transformed their maternal schools into an infant class annexed to their mixed schools, which has the advantage of a State appropriation. Hence it happens that many mixed schools have two classes—an infant class and a primary class—in both of which boys and girls are instructed together.

"The causes of private mixed schools are different. Among these are included many small schools in which little boys and girls (up to 12 years of age and even beyond this age) receive their instruction in common. The schools of this kind are generally found in the large cities. In Paris, for example, there are at least a dozen, perhaps more. Boys are admitted only to the lower classes."

The following statistics appended to the foregoing statement pertain solely to the mixed schools for the year 1896-97:

	Mixed schools.	
	Public.	Private.
Total number	19,991	155
Number directed by a lay master	15,534	23
Number directed by a lay mistress	5,974	415
Number directed by a religious order	483	512
Total number of classes	20,688	1,507
Total number of pupils	692,548	34,948
Boys	377,797	12,652
Girls	314,751	22,296

TABLE V.—*Distribution of pupils in separate and mixed schools.*

Class of schools.	Total enrollment.				Per cent enrolled.			
	1887.		1897.		1887.		1897.	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
Public:								
Separate	2,008,438	1,661,298	1,940,608	1,557,164	83.98	82.79	83.7	83.13
Mixed	400,222	345,151	377,797	314,751	16.02	17.21	16.3	16.82
Private:								
Separate	318,302	742,302	451,490	854,620	96.31	97.47	97.27	97.45
Mixed	12,165	19,041	12,652	22,336	3.69	2.53	2.73	2.55

STATISTICAL INDICATIONS OF THE EFFICIENCY OF SCHOOLS.

Average attendance.—One of the most important indications of the actual efficiency of schools is furnished by the item of average daily attendance. Although this item is not included in the French statistics, an approximate idea of the relation of attendance to enrollment can be formed by a comparison between the

enrollment in the months of December and June, the months respectively of highest and lowest school attendance, and the number present on a selected day in each of the months named. The following tabulation presents these particulars for the latest year reported:

	Number enrolled for every 1,000 pupils belonging.	
	Public schools.	Private schools.
Month of December, 1896.....	875	911
Present December 5.....	786	851
Month of June, 1897.....	846	911
Present June 5.....	732	841

It appears from the above that the enrollment in public schools in December was 87.5 per cent of the annual enrollment, and the attendance on the day selected 89.8 per cent of the month's enrollment; the enrollment in private schools for the same month was 91.1 per cent of the annual enrollment, and the attendance 93.4 of the month's enrollment. The corresponding ratios for June were: In public schools 84.6 per cent and 83.5; in private schools 91.1 and 93.3.

Number and proportion of classes.—The increase of classes as compared with the number of schools is an index of improvement in the schools themselves, since each class has its own teacher. The situation in this respect at successive dates was as follows:

	Number of schools.	Increase in a half decade.	Number of classes.	Increase in a half decade.
		<i>Per cent.</i>		<i>Per cent.</i>
1886-87.....	81,130	.....	132,309	.....
1891-92.....	82,533	1.7	140,656	6.8
1896-97.....	83,654	1.4	145,935	3.8

In the following tabulations comparison is made (1) between public and private schools; (2) between secular schools and schools belonging to the religious orders.

Average number of classes for every 100 schools, 1895-96.

Public schools for boys.....	175
Private schools for boys.....	301
Public schools for girls.....	173
Private schools for girls.....	258

Number of schools of each category, 1896-97.

Schools of—	Secular.	Belong- ing to re- ligious orders.	Proportion upon 100 schools.	
			Secular.	Belong- ing to re- ligious orders.
			<i>Per cent</i>	<i>Per cent.</i>
1 class.....	46,525	6,202	71.5	33.3
2 classes.....	11,033	6,243	17.0	33.5
3 classes.....	3,771	2,845	5.8	15.3
4 classes.....	1,524	1,344	2.3	7.2
5 classes.....	791	760	1.2	4.1
6 classes.....	614	470	.9	2.5
7 classes.....	301	327	.5	1.8
8 classes.....	483	418	.8	2.3
Total.....	65,042	18,612	100	100

The relatively higher ratio of classes in the private schools, which are chiefly schools belonging to religious orders, is due in part to location. Schools of this class are most numerous in the large cities and towns; furthermore, for every such school there is always more than one "brother" or "sister," as the case may be. There are about 80,000 nuns and 9,000 members of brotherhoods engaged in the schools, and their number can be almost indefinitely increased. They live with their respective orders, and receive not a penny of salary for their work, to which they are passionately devoted.

The higher primary schools and classes.—The total enrollment in primary schools includes the pupils in the higher primary schools and classes, in 1897, 64,658, distributed as follows:

	Public.	Private.
Classes:		
Boys.....	11,946	2,676
Girls.....	6,219	9,398
Schools:		
Boys.....	23,425	564
Girls.....	9,816	614
Total.....	51,406	13,252

For admission to the higher primary schools candidates must have attained the age of 12 years and have secured the certificate of primary studies, or must pass an examination to which none under 13 years of age are admitted. Attendance upon these schools is stimulated by a system of public scholarships (bourses). These are of three classes: "Bourses d'internat" (not to exceed \$100 per annum), which cover the cost of living in the boarding department, if the school has one; "bourses familiales" (\$100), which are in the form of an allowance for expenses at home, and bourses of support (\$20 to \$80). In 1897 the number of scholarships allowed was 1,006—viz, 626 to boys and 380 to girls.

An investigation into the subsequent career of students after leaving the higher primary schools was made in 1896, as had been done for the previous official reports of 1887 and 1892, with the following results:

	1887.	1892.	1897.
	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
Entered into normal or technical schools.....	11.3	17.2	17.6
Entered into lycées or colleges.....	5.3	5.6	3.3
Entered as instructors in other schools.....	1.5	.1	.4
Entered into the civil service.....	3.8	3.9	3.7
Entered into military or naval service.....	2.4	1.4	1.4
Employed in railroad service.....	1.6	1.5	1.5
Employed in commercial or technical careers.....	56.8	60.0	60.0
Employed in banks, notaries public, etc.....	6.3	1.7	2.4
Scholarships secured for study in foreign countries.....	.....	.6	.8
Unknown or dead.....	11.0	8.0	8.7

Teachers.—The number of teachers employed in the public and private primary schools in 1896-97 was 161,691, of whom 9,414 were in infant schools and 152,277 in the elementary and higher primary schools.

Table VI shows the number and classification of the primary-school teachers (infant schools omitted) for specified years during a period of six decades. Table VII shows the relative proportion of secular teachers and those belonging to religious orders at the dates of the last three official reports.

RETROSPECTIVE TABLE VI.—*Number and classification of teachers of primary schools at specified dates.*

Year.	Total number teachers.	Men.	Women.	Men and women.	
				Public.	Private.
1837.....	59,735	39,302	20,433	38,465	21,270
1840.....	63,449	40,504	22,905	40,843	22,566
1843.....	75,535	47,391	28,234	50,446	25,089
1853.....	108,799	49,585	59,214	70,441	38,353
1872.....	110,238	50,549	59,689	75,062	35,176
1876-77.....	110,709	51,717	58,992	80,063	30,646
1878-79.....	117,451	53,941	63,510	82,343	35,108
1879-80.....	119,876	55,182	64,688	83,581	36,299
1880-81.....	122,760	56,410	66,350	85,451	37,309
1881-82.....	124,965	58,137	66,828	88,220	36,745
1882-83.....	129,657	60,624	69,033	92,390	37,257
1883-84.....	132,580	61,654	70,926	94,784	37,796
1884-85.....	133,900	62,153	71,742	95,810	38,090
1885-86.....	137,000	63,670	73,330	97,996	39,004
1886-87 ¹	138,655	64,059	74,616	98,769	39,886
1887-88.....	141,063	64,631	76,432	100,417	40,646
1888-89.....	142,660	65,181	77,479	100,913	41,747
1889-90.....	143,259	65,512	77,947	101,144	42,115
1890-91.....	146,247	65,763	80,484	103,769	42,478
1891-92.....	146,674	66,363	80,311	102,436	44,188
1892-93.....	148,364	66,965	81,429	103,513	44,881
1893-94.....	149,371	67,071	82,300	104,028	45,243
1894-95.....	150,915	67,235	83,648	105,162	45,751
1895-96.....	151,563	67,203	84,200	105,587	45,976
1896-97.....	152,277	67,339	84,938	105,774	46,506
1897-98.....	153,503	.....	.....	103,355	47,150

¹ For this and for subsequent years Algiers included.RETROSPECTIVE TABLE VII.—*Lay v. clerical teachers.*

	Public schools.				Private schools.			
	1886-87.	1891-92.	1896-97.	Increase or decrease, 1886-87 to 1896-97.	1886-87.	1891-92.	1896-97.	Increase or decrease, 1886-87 to 1896-97.
Men:								
Lay.....	53,072	55,559	56,373	+ 6.21	1,842	1,423	1,273	-33.61
Belonging to religious orders.....	2,544	132	00	-100.00	6,580	9,249	9,685	+47.18
Total.....	55,617	55,691	56,373	+ 1.35	8,422	10,672	10,933	+30.17
Women:								
Lay.....	29,887	35,446	40,385	+ 35.12	6,923	6,186	5,500	-20.55
Belonging to religious orders.....	13,265	11,349	9,013	- 32.05	24,541	27,330	30,040	+22.40
Total.....	43,152	46,795	49,398	+ 14.47	31,464	33,516	35,540	+13.00
Grand total.....	98,769	102,486	105,774	+ 7.69	39,886	44,180	46,503	+16.58

TABLE VIII.—*Proportion of lay and of clerical teachers for the years specified.*

	Public schools.			Private schools.		
	1886-87.	1891-92.	1896-97.	1886-87.	1891-92.	1896-97.
Men:						
Lay.....	Per cent. 95.42	Per cent. 90.8	Per cent. 100.00	Per cent. 21.87	Per cent. 13.33	Per cent. 11.65
Belonging to religious orders.....	4.58	.2	.....	78.13	86.70	88.35
Women:						
Lay.....	69.26	75.74	81.75	22.00	18.45	15.47
Belonging to religious orders.....	30.74	24.26	18.25	78.00	81.55	84.53

Of the teachers employed in the public schools, 97 per cent on a total of 105,774 were possessed of diplomas and 43 per cent of the highest diploma (certificat d'aptitude pédagogique). The proportion of certificated teachers in the private schools was 87 per cent on a total of 46,503.

The remarkable progress made by France in securing trained teachers for its public schools is due in great measure to the liberal provision of normal schools and the high standard at which these are maintained. Every department has complied with the law requiring the establishment of two normal schools, one for men and the other for women, or has been authorized to combine with another department for this purpose. The State shows its solicitude in this matter by the maintenance of two superior normal schools, one for men at St. Cloud, the other for women at Fontenay-aux Roses, in which professors are trained for the primary normals. These two superior schools are really post-graduate institutions, requiring for admission either the higher diploma of pedagogy or a bachelor's degree.

The following statistics show the relative status of the primary normal schools at the beginning and end of the last half decade reported:

	Number of schools.	Number of students.	Number of offi- cers and teachers.
1891-92.			
Normal schools for men	87	3,878	890
Normal schools for women	85	3,707	711
1896-97.			
Normal schools for men	87	3,865	897
Normal schools for women	85	3,871	852

The total number of graduates during the half decade 1888 to 1892 was, from the schools for men, 7,189; from the schools for women, 5,615. The corresponding numbers for the half decade 1893 to 1897 were, men, 6,199; women, 6,189. Total for the decade, 25,142, or an average of 2,514 annually.

Expenditure.—The total expenditure for primary education in 1896-97 amounted to 214,015,250 francs (\$42,803,050). This sum includes expenditure for primary normal schools and for infant schools, the current expenditure for the primary schools proper (elementary and superior) not being separately presented. On the basis of this total the expenditure per capita of enrollment in public primary schools (viz, 4,642,609, infant schools included), says M. Levasseur, is found to be 46 francs (\$9.20). It is difficult to institute comparisons on this basis, because of changes in the financial administration since 1890, but this the statistician has attempted with results that are shown in the following table. These results, he explains, are not exactly comparable, but they establish beyond doubt the fact of steady increase in the per capita expenditure for the public primary education.

These estimates do not include the payment of interest on the moneys advanced for school buildings. If this item were included in the estimate for 1896-97, it would raise the per capita expenditure to 56 francs (\$11.20).

The expenditure for private primary schools¹ is not known, but on the supposition that it is relatively the same as for the public schools, the total annual expenditure for primary education is estimated by M. Levasseur as 293,000,000

¹According to a recent estimate, 60,000,000 francs (\$12,000,000) are annually raised for the church schools. All Catholics, even the humblest and poorest, cooperate in the work. The money "is chiefly raised by what is called 'The Sou of Christian Schools,' a widespread inter-diocesan guild whose headquarters are in Paris. This guild enrolls most of the devout Catholics of France and binds them to a share in the good work. Some undertake to give a sou a week, some a sou a day, some more."

francs (\$58,600,000), not including rentals, and including rentals, 350,000,000 francs (\$70,000,000).

Total current expenditures for public primary schools.

Year.	Total expenditures.		Proportion from each contributory source.		
			State.	Departments.	Communes.
	<i>Francs.</i>		<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
1877.....	94,337,554	\$18,879,510	25	18	57
1881-82.....	132,514,019	26,462,802	68.25	13.22	29.53
1885-87.....	172,900,515	34,530,103	48.80	10.50	40.90
1891-92.....	186,306,075	37,261,215	67.60	-----	32.40
1895-97.....	214,015,250	42,805,050	67.02	-----	32.98

Expenditure per capita for years specified.

Year.	Per capita of population.		Per capita of enrollment in public primary schools (infant schools included).	
	<i>Francs.</i>		<i>Francs.</i>	
1877.....	2.55	\$0.51	23.45	\$4.69
1881-82.....	3.51	.70	30.25	6.05
1885-87.....	4.52	.90	34.85	6.97
1891-92.....	4.82	.96	39.26	7.85
1895-97.....	5.55	1.11	46.00	9.20

MOVEMENT FOR PROLONGING THE EDUCATION OF THE PEOPLE.

The obligatory period of primary instruction extends from the sixth to the thirteenth year, but a child who passes the examination for the certificate of primary studies is exempt from the obligation to attend school. Candidates may be admitted to this examination at 11 years of age, and in fact a large proportion of those who seek the certificate do so at that early age. Hence the very means taken to increase the interest of pupils tends to shorten their school term. The majority of the children leave school at an earlier age than 13, and even for those who pass the whole obligatory period in school the wholesome restraints of instruction and constant supervision are too soon removed. It is also true in France, as in other countries, that elementary instruction, by its natural limitations, does not leave the same lasting effect upon the character or furnish the same intellectual resources as higher education.

The condition of the young people of the laboring classes thrown upon the world with meager attainments and without preparation for any particular industry has long excited the serious attention of the Government and of public-spirited, earnest men and women throughout the country. The recent vigorous movement for extending the provision for adult education is the outcome of this solicitude. The Government has given substantial aid to the cause, and in 1895 ordered a special investigation, with a view to obtaining complete information as to the status of the work and to determining the means for extending and improving it. This commission was intrusted to M. Édouard Petit, a professor in one of the Paris lycées and an indefatigable promoter of the cause of adult education. He found teachers and professors everywhere alive to the importance of the effort and ready to give their aid in establishing and maintaining classes. Numerous private societies entered into the work with great spirit, and in 1895 the Havre "Society for Instruction by Objects" (enseignement par l'aspect) celebrated its fifteenth anniversary by calling a congress of all the societies engaged in promoting popular

education to consider the subject of the systematic instruction of adults and adolescents. The minister of public instruction presided over the congress, and the resolutions of this body have shaped in a measure the subsequent official regulations. These schools and classes, which are held generally in the evening, sometimes on Sunday, offer courses of instruction for illiterates, review courses, and continuation courses. The last named have usually a technical or industrial character and prepare the student, especially in the rural communities, for agriculture and other pursuits. The local adaptation of the courses is carefully studied, and also their relation to the age and economic condition of the students. Civic instruction has a large place in the programmes, and the subject is much more thoroughly treated than is possible in the primary schools. The students in general show deep and earnest appreciation of the opportunities thus afforded. The growth of the work is shown by the following statistics:

Year.	Number of courses of lectures.			Number of attendants registered.	Number of regular attendants.		
	For men.	For women.	Total.		Men.	Women.	Total.
1895-96.....	13,920	1,808	15,728	400,000	-----	-----	270,500
1896-97.....	20,039	4,429	24,528	709,000	340,926	68,555	409,481
1897-98.....	22,939	7,429	30,368	850,000	378,196	104,711	482,907
1900.....	-----	-----	38,291	-----	-----	-----	540,000

Various efforts for promoting the social well-being of young people have grown out of this movement for their continued education. Among these are the formation of mutual aid associations and of friendly societies (*petits amis*). The former increased from 10 associations in 1896 to 1,600 in 1900. They included 12,000 schools and 450,000 young members.

The friendly associations increased from 56 in 1889 to 4,784 in 1900, having 234,958 members and disposing of funds to the amount of 900,000 francs (\$180,000).

TABLE IX.—*Educational statistics of the cities of France having more than 100,000 inhabitants, 1896-97.*

PART A—INFANT SCHOOLS (ÉCOLES MATERNELLES).

Schools.	Paris.	Lyon.	Mar- seilles.	Bor- deaux.	Lille.	Tou- louse.	St. Étienne.	Roubaix.	Nantes.	Le Havre.	Rouen.	Rheims.	Total.
<i>Public.</i>													
Number.....	149	40	27	15	25	11	25	12	8	15	8	13	348
Teachers.....	641	97	76	51	69	20	70	37	17	46	21	36	1,181
Pupils.....	50,731	7,563	6,885	4,706	5,504	1,749	5,242	5,267	1,340	4,069	1,472	5,545	100,013
<i>Private.</i>													
Number.....	93	45	41	26	33	25	17	20	6	1	10	11	328
Teachers.....	46	58	64	52	75	35	32	29	8	2	15	23	489
Pupils.....	10,665	5,649	4,945	3,527	7,634	2,428	2,572	3,321	379	80	1,276	2,361	46,477

PART B—ELEMENTARY PRIMARY SCHOOLS.

<i>Public.</i>													
Boys:													
Number.....	200	53	71	20	25	20	26	15	13	12	9	13	487
Teachers (men).....	1,454	225	280	157	120	110	130	86	55	116	69	68	3,199
Pupils.....	82,470	10,631	15,661	8,818	6,372	4,847	5,811	6,206	3,246	5,477	3,896	4,344	157,286
Girls:													
Number.....	186	54	71	21	24	24	26	12	13	12	12	15	450
Teachers (women).....	1,638	219	270	131	133	83	105	63	64	105	84	62	2,999
Pupils.....	70,002	9,410	11,562	6,836	5,116	3,649	4,698	4,321	3,054	4,757	4,059	4,063	132,554
<i>Private.</i>													
Boys:													
Number.....	151	71	80	23	28	16	17	9	16	5	12	13	441
Teachers (men).....	533	279	240	97	140	61	91	63	65	30	48	47	1,694
Pupils.....	28,638	7,450	8,047	4,182	6,654	2,659	3,521	3,125	3,349	1,608	2,162	2,811	74,204
Girls:													
Number.....	643	154	207	92	44	77	42	21	45	24	45	28	1,402
Teachers (women).....	2,331	477	623	331	351	263	181	121	194	116	104	146	5,242
Pupils.....	58,724	11,218	13,222	8,898	9,015	5,445	4,839	4,500	4,801	3,414	4,323	4,146	132,565

TABLE IX.—*Educational statistics of the cities of France having more than 100,000 inhabitants, 1896-97—Continued.*

PART C—HIGHER PRIMARY SCHOOLS.

Schools.	Paris.	Lyon.	Mar- seilles.	Bor- deaux.	Lille.	Tou- louse.	St. Étienne.	Roubaix.	Nantes.	Le Havre.	Rouen.	Rheims.	Total.
<i>Boys.</i>													
Number.....	13	3	2	1	1	1	1	1	1	1	1	1	27
Teachers (men).....	544	16	10	8	11	8	8	12	19	8	7	21	672
Pupils.....	4,917	633	317	224	315	326	157	333	163	189	245	230	8,619
<i>Girls.</i>													
Number.....	8	3	2	1	1	—	1	1	—	1	1	1	20
Teachers (women).....	229	14	10	8	11	—	10	11	—	8	8	7	316
Pupils.....	2,371	459	286	249	308	—	195	159	—	150	211	160	4,618

TABLE X.—*Enrollment in elementary primary schools in cities of more than 100,000 inhabitants in 1891-92, 1896-97.*

Cities.	1891-92.			1896-97.			Increase or decrease, 1891-92, 1896-97.
	Population.	Enrollment.		Population.	Enrollment.		
		Public.	Private.		Public.	Private.		Total.
Paris.....	2,477,957	150,327	92,155	2,536,834	153,072	87,392	240,464
Lyon.....	416,629	20,578	19,764	406,028	19,801	18,668	38,469
Marseilles.....	403,749	22,518	20,113	422,289	27,532	21,263	48,301
Bordeaux.....	252,415	114,830	113,635	256,996	15,654	15,010	28,963
Lille.....	201,211	217,511	27,965	216,276	16,559	23,275	41,225
Toulouse.....	149,791	9,168	17,446	149,983	8,697	8,104	16,801
St. Etienne.....	122,780	10,482	18,431	136,030	10,569	8,849	18,869
Roubaix.....	133,443	11,691	8,303	124,631	19,934	7,771	18,579
Nantes.....	112,352	—	—	123,962	6,122	6,122	13,893
Le Havre.....	136,369	8,803	13,544	119,470	10,254	4,988	15,292
Rouen.....	114,917	7,583	6,998	113,219	7,435	6,839	14,294
Rheims.....	104,186	—	—	107,962	8,444	6,987	15,431

11890.

2 1883.

3 1897.

TABLE XI.—*Showing for cities of more than 100,000 inhabitants the ratio of primary-school enrollment to total population and the ratio of public-school enrollment to total enrollment.*

Cities.	Ratio of total enrollment to population.		Ratio of public-school enrollment to total enrollment.	
	1891-92.	1896-97.	1891-92.	1896-97.
	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
Paris	9.78	9.47	61.99	63.65
Lyon	9.69	8.25	51.09	51.47
Marseilles	10.55	11.02	52.82	53.41
Bordeaux	11.07	11.15	51.24	54.61
Lille	17.04	18.43	49.95	49.26
Toulouse	11.64	11.20	52.25	51.64
Saint Etienne	15.01	13.86	56.88	55.69
Roubaix	14.98	14.90	58.47	53.46
Nantes		11.21		44.06
Le Havre	11.63	12.75	65.33	67.23
Rouen	12.68	12.62	75.83	52.15
Rheims		14.29		54.72

THE ORGANIZATION OF THE STATE-TEACHING SYSTEM (UNIVERSITY OF FRANCE) AND THE INSPECTORATE FOR PRIMARY SCHOOLS.

Public education in France forms a department of public affairs, under the direction of a cabinet officer, the minister of public instruction and fine arts (present incumbent, M. Georges Leygues).

The control of the minister is exercised through a graded series of appointed officials belonging to the central administration or to the academies (17 in number, including 1 in Algiers), which are the local subdivisions of the system. Public instruction is a State service, professors and teachers constituting a professional order whose qualifications, duties, privileges, honors, emoluments, and penalties are as rigidly fixed by law as those of other branches of the civil or those of the military service.

To the central administration belong the superior council of public instruction, the chiefs or directors of the three scholastic departments (superior, secondary, primary), the corps of general inspectors, and a large body of clerks or assistants.

The functions of the superior council (council of the Imperial University, 1808, transformed and liberalized) are advisory and in some cases disciplinary and judicial. This council consists of 60 members, one-fourth appointed by the President of the Republic and the remainder elected by their colleagues (professors and teachers), the term of service being four years. General inspectors—10 for secondary and a large number for primary instruction—are sent annually from Paris to investigate and report upon the condition of colleges and schools in their respective jurisdictions (service dating from 1808, extended to primary instruction, 1846).

The centralized power is reenforced by the peculiar organization of the system. It consists of 17 academies or scholastic subdivisions, each comprising a university and classical college and its quota of primary schools (after the general plan of the Imperial University created in 1808). At the head of each academy is a rector, an official of great dignity, appointed by the President of the Republic. He is assisted by a council of university professors, of whom four are his own nominees. The control of the rector extends nominally to all three grades of education, but here we consider exclusively his relation to primary education. In this province he is virtually represented by the academy inspector, excepting as regards the departmental normal schools. On the scholastic side the normal schools are under the rector's mediate direction. The financial affairs of the normal schools pertain exclusively to the academic inspector. This official is appointed by the minister of public instruction, generally from the corps of secondary professors

or of primary inspectors; in any case he must have had extended experience in teaching or have secured a university degree. The importance of the service was emphasized in the educational exhibit of the Paris Exposition (1900) by a special monograph on the subject, prepared by the director of primary instruction, M. Bayet. In summing up the duties and the influence of the academy inspectors, M. Bayet says:

Upon them falls the task of applying the laws, decrees, and regulations which have made primary education compulsory, gratuitous, and strictly secular, reformed the programmes, and assigned the principal place to moral and civic instruction. It is their duty to explain the spirit of these regulations to the teachers under their charge, to guide them by their counsels, to sustain their courage, to save them from failures. They must also see to it that the schools are properly installed; they must excite the local ambition, keep in touch with the local authorities, with the elected councils, and the principal citizens in order to draw to the schools the current of sympathies necessary for their support and development. * * * The academic inspectors have fulfilled their obligations with remarkable success. They have put their minds and their hearts into the work. This is the unanimous testimony of the rectors, of the inspector general, and of all who are in a position to observe its progress.

But the academy inspector has a wider province than elementary education; his supervision extends also, though in a subordinate sense, to secondary institutions.

This double action offers, says M. Bayet, the great advantage of unifying the direction of institutions which, although engaged in imparting instruction differing in degree and in the sanctions which are attached to them, have as their common purpose national education. The academy inspector is thus the bond of union between functionaries who, without him, would remain isolated from each other.

The true unit of primary-school administration in France is the department—a civil district which for educational purposes is treated as a subdivision of an academy. France (including Algiers) comprises 90 departments, which are unequally distributed among the 17 academies. Chambéry, the smallest academy, comprises 2 departments; Paris, the largest academy, 9. The departments also vary in extent and in population. The smallest has 88,000 inhabitants; the largest (Seine), three and a half millions; but, large or small, their adoption as units of administration has saved France from the ills of petty, autonomous school districts.

The departmental administration includes two normal schools (one for men and one for women) and the several classes of primary schools.

The civil head of every department and the head also of its school affairs is the prefect, appointed by the President of the Republic, and the only political official in the long series of those who pertain to the State teaching service. Around his prerogatives—especially the most important prerogative of appointing teachers—is waged a perpetual conflict, but so far only with the result of limiting his power by the advisory functions of the academy inspector and of a professional council. This departmental council of public instruction, which must be distinguished from the general council of the department, comprises 14 members (the department of the Seine has more), including 4 members from the civil council elected by their colleagues, 2 primary inspectors designated by the minister, the directors of the two normal schools, and 4 teachers (2 men and 2 women) elected by their colleagues, and when matters are under discussion affecting private schools, 2 members representing the same, one clerical, the other, lay. Of this council the prefect is president and the academy inspector vice-president. The term of service is three years, and the members receive no salary, but are allowed traveling expenses.

The council meets four times a year, and special sessions may be called by the prefect.

The functions of the council are educational, administrative, and judicial.

It supervises the carrying out of courses of study and general regulations prescribed by the superior council, including the arrangements for the medical super-

vision of schools; deliberates on all propositions touching reforms, new departures, the financial needs of the schools, the distribution and location of schools, authorization of private schools, the authorization of foreigners to teach; in short, upon all questions touching the scholastic or business interests of primary education.

Its disciplinary powers over teachers are very great, extending to a complete prohibition to teach in any school. The teacher has, however, the right of appeal to the superior council of public instruction.

The academy inspector submits most of the propositions upon which the decisions of the council and the executive orders of the prefect are based.

It will readily be understood that the academy inspector, both from the prestige of his position and his wide experience, is in general the controlling spirit in the administration. Besides his routine duties, the inspector must also be watchful as to the carrying out of the essential principles of the school laws—the principle of compulsion, of free tuition, of exclusively secular instruction, of an exclusively lay personnel in the public schools. Obviously he has no time to look into the work of individual schools. This is the duty of primary inspectors, who are chosen from the élite of the teachers by a rigid examination, appointed by the minister of public instruction in the proportion of one to a hundred and fifty schools (the ideal proportion is assumed as one to a hundred schools), and who receive instructions only from the academy inspector, the rector, the general inspectors, or the minister.

The duties of these inspectors are distinctly defined. They must approve the sites selected and the buildings erected for schools, attend to the carrying out of orders relative to the opening of private schools, auxiliary public schools and classes (for adults, manual apprenticeship, etc.), authorize the transfer of pupils from one grade of school to another, approve time tables, receive the reports as to delinquent pupils, participate in the proceedings of all local school committees, conduct the examinations of pupils for the “*certificat d'études*,” take part in the examination of candidates for the departmental normal schools and for teachers' diplomas, and convene the teachers of their respective districts for instruction and conference (meetings corresponding to teachers' institutes in our own country).

This service, like that of the academy inspectorate, was made the subject of a special monograph prepared for the Paris Exposition by M. Bayet.

After tracing briefly the development of the service and stating the conditions imposed upon candidates by the law of 1886, he leaves the incumbents to speak for themselves by copious extracts from their own reports. These reveal complete familiarity with the work of the schools and great power of discriminating criticism. As to the general efficiency of this branch of the inspection, M. Bayet contents himself with heartily reaffirming the following opinion expressed by Jules Ferry in 1881:

During the half century that this institution has existed with us it has proved its value, and the services it has rendered are such that one can say it has no longer any adversaries. Organized at first very feebly as a sort of benevolent and temporary committee of the *arrondissement* councils, long condemned to feel its way slowly and to recruit its ranks with volunteers who were more remarkable for their good will than their competence, the primary inspectorate has won for itself by the force of circumstances, or rather by its own merit, the important place it occupies in our school organization.

Other countries have been able to surpass us in the perfection of their equipment and methods, but none, perhaps, has so speedily and resolutely linked the destinies of its national education to the homogeneous composition and incessant activity of an official body of professional inspectors.

To-day, when the primary inspector is necessarily recruited from among the élite of the teaching body and appointed on the results of competition in professional knowledge, the standard of which has recently been once more raised, he is one of the functionaries of State whose authority in its modest limits is the best established and the readiest accepted.

The examination for primary inspectors.—Candidates for admission to the examination for the certificate of fitness for the primary inspectorate must be at least

25 years of age, must have diplomas showing satisfactory attainments, and must have taught at least five years in public schools.

The examination, which is the same also for directors of normal schools, is both written and oral, including a practical test. The written part is conducted simultaneously in the chief places of the several departments, the subjects being the same for all. Those who pass this division repair to Paris for the oral part, which is conducted by a special board. This oral division includes pedagogy, school law, and school management. Each candidate is asked to explain orally a passage from some one of the prescribed authors. The following is the list of subjects for the composition in pedagogics for 1900:

First session. What is the meaning, as regards primary education, of the phrase *préparer sa classe* (prepare the lessons beforehand)? How will you impress upon teachers who have had several years' experience of teaching that it is necessary to prepare the work for one's class all one's life long?

The following is the subject set for the composition in school administration for the same period:

First session. The higher primary schools: their general organization and staff. [Candidates should avoid discussing details in the programme.]

For 1898-1900 the authors set included, among others, Fénelon, J. J. Rousseau, Condorcet, Émile Boutroux, F. Buisson, and Horace Mann. For 1901-1903 the extracts are taken from the works of Montaigne, Rousseau, Channing, Michelet, Bain, Pécaut, and Jules Ferry. It is worth noting the large use made of English and American writers on education and the absence of any German books on the subject.

The following are a few specimens of the questions in pedagogy:

1. In a pedagogical conference, set forth the principal reasons why the school attendance has been defective, and indicate to the teachers what they can do, without having recourse to the school commission (local committees), to improve it.
2. Discipline. How do you understand its application to the pupils of all ages in your primary schools?
3. How, in your opinion, can a teacher in his commune extend his educational influence outside of and beyond the school?
4. How would you regulate the use of monitors in the elementary school?

Specimens of questions on school law and administration:

1. The functions and rôle of the inspector of primary education in the matter of examinations.
2. Right of opposition to the opening of private schools. Closing of the schools.
3. Class books, prizes, and supply of school material.

The primary inspectors are divided into five classes. For promotion from a lower to a higher class, an inspector must have served three years in the former and be on the list of eligibles prepared by the academy inspector.

The annual salaries are 3,000 francs in the lowest class, with an increase of 500 francs for each class up to the maximum of 5,000. These salaries are paid by the State. The inspectors are also allotted so many traveling days' expenses at the rate of 10 francs a day, according to the size of their respective circonscriptions, and finally the department allows them a minimum indemnity of 300 francs. [In Seine the inspectors are paid on a higher scale.]

The inspection of infant schools (*écoles maternelles*) is confided to departmental inspectresses, who are also selected by rigid examination.

The medical inspection of primary schools is intrusted to physicians designated by the municipal councils.

Communal supervision.—The mayor and civil councilors of every commune (city or rural) have the right to inspect the local schools in respect to the condition of school buildings, furniture, and supplies, the health and conduct of pupils; but they have no authority to touch on the course of study or the methods of instruction.

There is also a school committee (*commission scolaire*) in each commune, which supervises and encourages school attendance. In Paris and Lyons there is a local committee for each municipal *arrondissement*.

The academy inspector and the municipal or communal council have the appointment of the members of the committee, the mayor being always president and the primary inspector one of the members.

SECONDARY EDUCATION.

To the department of secondary instruction (director, M. Rabier) belong the lycées, or state classical colleges, for boys, the state lycées for girls, and the communal colleges, established by the communal or local authorities and aided by the State. In 1899 the lycées for boys numbered 109 and enrolled 53,708 pupils. The communal colleges numbered 227, with an enrollment of 32,891. This gives a total of 85,599 boys in the public secondary schools. The church secondary schools for boys enrolled the same year 91,825 pupils (of these, 23,000 in the *petits séminaires* for students intending to enter the priesthood), and private secular secondary establishments for boys 10,182.

The public lycées and colleges for girls had an enrollment the same year of 11,402 students, and there were also 3,909 girls pursuing courses of secondary instruction in classes under public auspices. The attendance upon convent and private secondary schools for girls is not known.

The professors of secondary instruction (public) are appointed by the minister of public instruction. Their salaries, like those of the professors of superior instruction, are paid by the State, and they are also borne on the pension list.

The public secondary schools of France (lycées and communal colleges) provide a complete course of education distinct from that given in the primary schools. The latter prepare the children of the working classes for citizenship and for the intelligent pursuit of their humble avocations; the former impart that liberal education leading to the bachelor's degree, which is necessary for admission to the specialized courses of the universities and professional schools and also for entrance upon the public service.

The lycée is the typical secondary school; the local colleges have the same curriculum, so far as circumstances permit; often students pass from a college to a lycée for the completion of their studies.

The following statistics present a comparative view of the enrollment and distribution of secondary students for a period of twelve years.

Enrollment in secondary schools for boys.

Classes of institutions.	1887. ¹	1892. ²	1893. ²	1894. ²	1895. ²	1896. ²	1897. ²	1898. ²	1899. ²
State schools:									
Lycées	53,816	52,945	53,974	53,490	53,962	53,200	52,427	51,892	52,708
Colleges	36,086	32,508	32,709	32,421	32,161	32,234	32,412	32,510	32,891
Total	89,902	85,453	86,682	85,911	86,123	85,514	84,839	84,402	85,599
Schools of religious associations:									
Classical	50,085	51,087	51,377	53,265	57,250	58,506	62,188	67,643	68,825
Petits séminaires (preparatory to theological schools)		23,948	23,849	25,354	25,407	21,737	22,381	23,497	23,000
Total	50,085	75,035	75,226	81,619	82,657	80,243	84,569	91,140	91,825
Private secular schools	20,174	16,306	14,628	14,214	12,011	13,599	12,813	9,725	10,182
Total non-State	70,259	91,341	80,254	95,833	94,668	93,842	97,382	100,865	102,007
Grand total	160,161	176,794	175,937	181,744	180,791	179,356	182,221	185,267	187,606

¹ From *Statistique de l'enseignement secondaire des garçons*, 1887, pp. lvi, lxxviii, xcviii.

² Rapports faits au nom de la commission de budget, etc.—*Service de l'instruction publique* par M. Bouge, 1897, pp. 124, 125; also 1893, pp. 32, 33.

³ The same by M. Perreau, 1901, pp. 69, 70.

The classification of students in the lycées and colleges in 1899 was as follows:¹

	Total enrollment.	Classical course.	Modern course.	Special mathematics.	Preparatory division.
Lycées	51,997	20,032	14,489	4,783	12,688
Communal colleges	32,784	9,242	13,541	749	9,252

Proportion of total students in each division.

	Classical course.	Modern course, including special mathematics.	Preparatory course.
	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
Lycées	45	31	24
Communal colleges	28	44	28

From the foregoing table it will be seen that the independent or non-State schools, including the "petits séminaires," enroll the larger proportion of the students in secondary education. The Government has long viewed with alarm the growing influence of the church schools in this important field, and this solicitude, together with a widespread demand for a reform in the curriculum and organization of the State schools, has brought on what is called in France "the crisis of secondary education." The serious intention of the Government in respect to this matter has been shown by legislative action looking first to the reform of the public secondary schools, and second to the repression of anti-Republican tendencies in the independent schools.

In pursuance of the former purpose a commission was appointed in 1898 by the Chamber of Deputies to investigate the whole subject of secondary education and to suggest needed reforms.²

The conclusions of this committee have formed the basis of a measure elaborated by the minister of public instruction in advice with the superior council of public instruction, and the project now awaits legislative action.

The proposal³ deals with both sides of the secondary establishments—the domestic (internat) and the educational. The domestic régime has long been unsatisfactory from every point of view. One of the chief reasons for the falling off in the patronage of the State schools is alleged to be the scanty comforts enjoyed by the boarding pupils of the lycées, who are in the great majority. The food and lodging are poor, and the inmates have less freedom than soldiers in a barrack. The professors do not reside in the establishment, are present only during class time, and have no influence in forming the habits and character of the students. The latter are under the espionage of the répétiteurs (house tutors), who are generally despised because of their disciplinary functions, and are thus prevented from exercising any wholesome influence over the young men whose studies they partially direct.

In all these respects the lycées are inferior to the independent schools, church and private, which not only provide for their boarding pupils better living conditions, but also the certainty of constant intercourse with devoted, high-minded teachers. Under these circumstances many eminent men have urged that the State should withdraw from the direct administration of the lycées, retaining only control over the scholastic work and the teaching staff. This suggestion is evidently not practicable at present, but the conditions which have caused it explain

¹ Enrollment here given excludes day pupils.

² See Commissioner's Report, vol. 1, chap. 21, pp. 1107-1138.

³ See Bulletin Administratif, February 1, 1902, pp. 97-109.

the tenor of the new provisions touching the "internat" or domestic régime of the schools. The broad lines of reform in this respect as laid down by the minister are: Financial separation of the educational and domestic sides of the lycée, the latter to be self-supporting; increase of the dignities, qualifications, and responsibilities of the principals (*proviseurs*); professors to be brought into closer relation with the life of the students; the position of *répétiteurs* to be improved, their work as teachers elevated, and their disciplinary functions transferred to other officials; hygienic requirements to be strictly enforced; physical education to be seriously organized, with recognition either in the leaving examination or in the regulations for military service; recreation rooms and libraries for masters and pupils to be established in all lycées. All these provisions so far as they are applicable are extended also to the local (communal) colleges.

Important as the changes contemplated in the domestic régime of the lycées, they are of less general interest than those relative to the curriculum and to the diploma, which is the goal of secondary studies. As regards the studies it is proposed that they be grouped in two cycles, one comprising four years, the other three years. This plan, the minister admits, is not well suited to Greek and Latin, which branches, in particular the latter, have heretofore been chiefly considered. The mere suggestion of the change indicates the importance which other branches have recently assumed. "By this division into cycles," says the minister, "it will be possible for the pupil who leaves the lycée at the close of the fourth class (*troisième*) to acquire more than mere beginnings and to carry with him a fund of knowledge which, though limited, may be complete and useful. For a certain proportion of the students this is greatly to be desired. A standard will thus be set for those who are pressed by the necessities of life, and for those who have no taste for study, who follow the course against their will and are a dead weight upon their classes." In the first cycle choice may be made between a classical and a nonclassical course. The classical programme will include morals, civics, French, Latin, one modern language, history, geography, the elements of mathematics, and drawing. Latin is to be taught in three graduated courses of a year each, and as far as possible without change of teachers during the three years. Greek, which is optional, is to begin the third year. The nonclassical programme includes for the first cycle morals and civics, French, one modern language, history, geography, the elements of science and drawing. To these subjects will be added optional courses, commercial, industrial, or agricultural, according to local demands.

At the end of the first cycle a certificate of studies will be conferred upon those who, by their daily records and the testimony of the professors, are found to deserve it. For those who leave the lycée at this stage the certificate will be valuable, and for those who remain it will have weight in their candidacy for the bachelor's degree which is the goal of the complete programme. From the choice of studies allowed in the first cycle, it will follow that three classes of students will present themselves for the second or three years' cycle—those who have studied both Latin and Greek, those who have studied Latin but no Greek, and those who have studied neither Latin nor Greek. The first class will naturally push their classical studies as far as possible. The second class will give their attention chiefly to the sciences and the modern languages, in which subjects the third class will be united with them. The duration of studies will be the same for all three classes, and all will lead alike to the bachelor's degree. The diploma will have the same value in all classes, but will mention the course which the candidate has pursued. It is evident, however, that this single diploma will not represent identical possibilities in all cases. For example, the student who has not taken Greek can not become a candidate for the *licence-ès-lettres*.

The new measure eliminates the modern course of the lycée, which is shorter by two years than the classical course, but leads like that to a bachelor's degree. Provision is made, however, for a new section, based upon the nonclassical division of the lower cycle. Like that division, the new division is intended particularly for students who seek a preparation for active business. It will comprise a short specialized course in the living languages and in the sciences considered in respect to their practical applications. This course will be established only where it is demanded and with special adjustments to local industries. Students who finish this course will be tested by final examination, which will entitle them to a certificate, having nothing, however, in common with the baccalaureate.

The above summary shows in brief the solution which the educational officials present of the complex problem of secondary education.

Outside the university circle the project is seriously criticised, especially because of the reduction of the lycée course from eight to seven years and the endeavor to burden the lycée with specialties which are, even in the project, stamped as foreign to the purpose and spirit of liberal education.

For a clear understanding of the changes proposed, the new scheme sketched above should be compared with the existing scheme of the lycée courses, as presented in the tabular view appended to this article.

The purpose of the Government to suppress adverse influences in the domain of secondary education is shown by the passage of a law (the Law of Associations, July 1, 1901) determining the conditions under which associations may acquire the legal right to exist and to work in France.

Although the law deals with all associations, secular and religious, its avowed intent was to bring the religious orders into subordination to the civil authority, of which they had been hitherto entirely independent. It would be out of place here to consider either the general scope of the law, the political and social conditions which have led to its passage, or the agitations which it has excited. It must suffice to state simply the conditions which are imposed upon the religious orders and the probable effect upon their educational work. The law requires that every association shall publish, through its founders, its title and object, the place of its establishment, and the names, professions, and domicile of those who are in any way concerned with its administration or management. These declarations must be made at the prefecture of a department or the subprefecture of a district. Any changes in the administration or modification in the statutes must also be reported within three months.

Three months was the limit of time allowed for associations to comply with all the conditions. At the expiration of the time those associations that had not sought authorization were to be declared illegal and dissolved. In such cases the property belonging to members of an association before its formation, or since acquired by them by succession, should be restored. The property acquired gratuitously and not specially assigned by a deed of gift to a work of charity may be reclaimed by the donor, his heirs or assigns. After a delay of six months all property that has not been claimed or devoted to some work of charity shall be liquidated, and the sum realized set apart to be used by the public liquidator according to the regulation of public administration of the law.

Later regulations defining the methods by which the law should be enforced placed the responsibility of the authorization and subsequent surveillance of the religious orders upon the respective diocesan bishops, thus subordinating to the ordinary church authorities those bodies which had hitherto claimed canonical exemption. The number of orders affected by the law is estimated at 1,663, of which 152 are for men and 1,511 for women. They comprise about 16,500 establishments; of these a little above 5,000 have applied for authorization. The members of the remaining 11,327 establishments have been dispersed, the greater part

having gone into other countries to prosecute their work. A very large proportion of these establishments maintain schools, but some are wholly devoted to missionary propaganda and works of charity. In some cases the educational work has been transferred to other hands and will be continued without violation of the law, but a large proportion of teaching establishments are closed.

Until an official inquiry has been made the actual effect upon education can only be conjectured. By reference to statistics already given it appears that nearly one-half the secondary classical instruction of the country and above one-third of the primary instruction was in charge of brotherhoods and sisterhoods when the law was passed.

Organization of the lycée classical course.

Elementary division:	Average age (years).
Preparatory class (<i>classe préparatoire</i>).....	8
Eighth (<i>huitième</i>).....	9
Seventh (<i>septième</i>).....	10

[Certificate of studies (*certificat d'études*) to be obtained before admission to the *sixième*.]

Division of grammar:	
Sixth (<i>sixième</i>).....	11
Fifth (<i>cinquième</i>).....	12
Fourth (<i>quatrième</i>).....	13

[*Certificat d'études* necessary for the *troisième*.]

Superior division (<i>division supérieure</i>):	
Third (<i>troisième</i>).....	14
Second.....	15
Rhetoric.....	16

[First examination for bachelor's degree.]

Philosophy.....	17
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[Second examination for bachelor's degree.]

In the class of philosophy options are allowed between three courses; according to the choice the student has his diploma inscribed, "*Lettres philosophie*," "*Lettres mathématiques*," or "*Lettres sciences, physiques et naturelles*."

Lycée classical course—Programme for classes above sixth.

NUMBER OF HOURS IN CLASS EACH WEEK.¹

Class.	Latin.	French.	Greek.	English or German.	History and ge- ography.	Science. ²	Draw- ing.	Total hours a week of 5 days.
Sixth.....	10	3	-----	1½	2½	1½	1½	20
Fifth.....	9	3	2	1½	2½	1½	1½	20
Fourth.....	5	2	6	1½	2½	1½	1½	20
Third.....	5	2	5	1½	2½	3	1½	20½
Second.....	5	3	5	1½	2½	1½	2	20½
Rhetoric.....	4	4	4	2½	2½	1½	2	20½

¹ By a decree of December 24, 1881, clergy of all denominations are admitted to the lycées to give religious instruction outside of class hours.

² Sixth class, zoology; fifth, geology and botany; fourth, geometry; third, mathematics and rhetoric.

Class of philosophy.

Studies.	Hours a week. ¹	Studies.	Hours a week. ²
Philosophy	6 $\frac{1}{2}$	Natural history	1 $\frac{1}{2}$
English or German (optional)	1	Contemporaneous history	2 $\frac{1}{2}$
Physics and chemistry	4 $\frac{1}{2}$	Drawing (optional)	2

¹ Some hours are reserved for special conferences or lessons; of these, 12 are given during the year to hygiene.

² For half a year.

Modern course of the lycée.

NUMBER OF HOURS IN CLASS EACH WEEK.

Class.	French.	German.	Language and literature—English, Italian, or Spanish.	History and geography.	Elementary law and political economy.	History of civilization and art.	Practical morals.	Philosophy.	Mathematics.	Bookkeeping.	Natural history.	Physics and chemistry.	Natural sciences.	Writing.	Drawing.	Total hours a week.
Sixth	6	6	.....	3	.....	.....	.....	.....	3	.....	1 $\frac{1}{2}$	.....	.....	1	3	23
Fifth	6	6	.....	3	.....	.....	.....	.....	3	.....	1 $\frac{1}{2}$	.....	.....	1	3	23
Fourth	4	4	6	.....	.....	.....	1	.....	3	.....	.....	3	.....	1	3	23
Third	4	3	3	.....	.....	.....	.....	.....	4	.....	.....	4	.....	.....	3	23
Second	4	3	3	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	3	23
First .....	.....	.....	.....	3	.....	.....	.....	3	.....	1	1	4	.....	.....	3	23
Science .....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	24
Letters	4	.....	.....	3	.....	3	.....	6	6	1	.....	.....	1	.....	1	24

PUBLIC LYCÉES AND COLLEGES FOR GIRLS.

The growth of the lycées and colleges for young women since their foundation in 1880 is shown by the following statistics:

Enrollment in lycées and colleges for young women from 1881 to 1899.¹

Year.	Lycées.			Colleges.			Total.
	Academic department.	Primary department.	Total.	Academic department.	Primary department.	Total.	
1881 .....	.....	.....	71	.....	.....	229	300
1882	315	206	521	429	567	996	1,517
1883	817	464	1,281	787	869	1,656	2,937
1884	1,080	618	1,698	1,090	988	2,048	3,746
1885	1,421	522	2,243	1,122	1,012	2,134	4,377
1886	1,713	1,048	2,761	1,218	953	2,206	4,967
1887	1,953	1,295	3,248	1,446	1,152	2,598	5,845
1888	2,191	1,481	3,672	1,596	1,366	2,962	6,634
1889	2,294	1,570	3,864	1,571	1,416	2,987	6,851
1890	2,326	1,120	3,955	1,004	1,484	3,088	7,043
1891	2,831	2,132	4,963	1,410	1,272	2,682	7,645
1892	3,214	2,411	5,625	1,460	1,416	2,876	8,501
1893	3,704	2,822	6,526	1,365	1,358	2,723	9,249
1894	3,924	2,899	6,823	1,692	1,515	3,117	9,940
1895	4,055	3,108	7,163	1,702	1,598	3,250	10,413
1896	4,266	3,297	7,563	1,653	1,429	3,082	10,645
1897	4,352	3,440	7,792	1,648	1,408	3,051	10,843
1898	4,378	3,623	8,001	1,882	1,519	3,401	11,402
1899	4,675	3,756	8,431	1,930	1,633	3,563	11,994
Increase 1882-1899	4,360	3,550	7,910	1,501	1,066	2,567	10,477

¹ From *Lycées and Colleges for Young Women*, by M. Camille Sée (author of the law of 1880), edition for the Exposition of 1900.

The teaching staff of the lycées and colleges in 1899 comprised 687 professors and assistants. The financial review presented by M. Camille Sée, in his history of the measure providing higher education for women, shows that the State advanced the sum of 33,409,437 francs (\$6,681,887) from 1891 to 1898 for building purposes. These advances are to be met by the cities and towns in which the lycées are situated.

The total receipts of the lycées and colleges, exclusive of the boarding departments, amounted in 1898 to 3,764,354 francs, of which the State furnished 70 per cent, tuition fees 27 per cent, and local authorities the balance.

HIGHER EDUCATION.

To the department of higher education (Director M. Liard) belong the universities and the special schools of university rank which are under the minister of education.¹ Paris is the seat of these special schools, and also of the principal university. Under the law of 1896, 15 of the former faculty groups have been organized into independent universities. They registered 29,377 students in 1900, an increase of 11,772, 68 per cent above the number enrolled in the faculties in 1888.

The professors of the State universities are appointed by the President of the Republic in advice with the minister of public instruction. The choice is made from two lists, one furnished by the university council, the other by the superior council of public instruction. The salaries of professors are paid by the State, and they have a right to a pension.

Statistics of State universities.

Designation.	Faculties, 1887-88.		Universities, 1897-98.		1900.
	Number of students. ²	Income. ²	Number of students. ³	Income. ³	Number of students. ⁴
Paris.....	9,140	\$685,284	12,131	\$1,065,538	12,192
Aix-Marseille.....	433	94,261	849	129,983	772
Besançon.....	130	43,797	197	54,026	237
Bordeaux.....	1,029	142,064	2,144	219,656	2,124
Caen.....	531	101,556	772	130,687	609
Chambéry.....		2,600		2,620	
Clermont.....	96	45,492	257	53,027	279
Dijon.....	236	69,897	604	91,002	649
Grenoble.....	318	65,431	476	86,192	558
Lille.....	810	138,357	1,425	195,057	1,141
Lyon.....	962	175,640	2,335	250,940	2,465
Montpellier.....	890	156,110	1,496	188,960	1,531
Nancy.....	454	158,255	1,001	197,377	1,064
Portiers.....	391	82,310	944	111,710	752
Rennes.....	659	114,345	1,503	161,992	1,135
Toulouse.....	1,303	120,618	1,885	181,450	2,002
Schools of medicine not included in the universities.....					1,005
Algiers.....	223	98,623	763	112,329	862
Total.....	17,605	2,294,640	23,782	3,172,546	29,377

¹ Collège de France (appropriation, 1900, \$104,000), Museum of Natural History (appropriation, \$193,500), Practical School of High Studies [École Pratique des Hautes Études (State appropriation, \$34,200; city, \$7,200)], Superior Normal School (110 students; appropriation, \$103,120), School of Charts [École Nationale des Chartes (students, 69; appropriation, \$14,900)], School of Oriental Languages (students, 415; appropriation, \$33,600), French School of Archaeology at Rome (appropriation, \$14,600), French School at Athens (appropriation, \$21,600), École Nationale des Beaux-arts (students, 2,000; appropriation, \$84,052). The remaining special schools, such as the Conservatoire des Arts et Métiers, École Nationale Supérieure des Mines, etc., are under the charge of other ministers.

² Statistique de l'enseignement, 1878-1888, pp. 133-418.

³ Statistique de l'enseignement, 1900, pp. 10-180.

⁴ Rapport portant fixation du Budget Général, Ministère de l'Instruction Publique, 1901 (Pereau) pp. 15, 18.

Degrees conferred by French universities, 1897-98.

	Bachelor.	Licentiate.	Doctor.	Certificate of capacity.
Protestant theology	20	3		
Law	1,440	1,184	251	255
Sciences	2,185	261	39	
Letters	5,358	411	23	
Total	9,003	1,859	313	255

Medicine:	
Doctor	1,099
Health officer	67
Dental surgery	35
Certificate of midwifery	242
Pharmacy:	
Diploma	611
Herbalist	247

The total of 13,731 diplomas conferred in 1897-98, as shown in the above table, includes 72 conferred upon women. These were distributed as follows: Law, licentiate, 1; sciences, bachelor, 1, licentiate, 15; letters, bachelor, 26, licentiate, 3; medicine, doctorates, 16, certificates, 8; pharmacy, certificates, 2.

The recent history of higher education in France is concerned mainly with the outcome of the measures reorganizing the universities.

While preserving the organic unity of the State system, technically called the University of France, these measures have restored in part the independence which belonged to the old universities of France. After the decree of suppression issued by the convention in 1793, higher education was relegated to isolated special schools. In the Imperial University, created in 1808, letters and science and the learned professions were represented by faculties which were scarcely more than examining bodies. "Napoleon," says M. Bréal, "whose conceptions assumed inevitably a hierarchical and administrative form, would probably never have created faculties of letters and of science, but that it was necessary to have some one to confer diplomas."

The policy proved disastrous to the interests of higher education. Even the Sorbonne, which alone preserved in some measure the unity and philosophic spirit of university work, could not resist the paralyzing influence.

After the fall of Napoleon the spirit of culture revived, but the harassed and impoverished condition of the country prevented practical reforms. As late as 1875 the condition of higher education was still deplorable. In a speech made in the Senate that year Paul Bert dwelt upon the miserable equipment and inefficient organization of the faculties:

We have in France [he says] 43 faculties of diverse orders; they are distributed in 15 or 16 cities and they comprise each four or five professors charged to cover the whole domain of the sciences and of letters. In the science courses there is scarcely a single student and few in those of letters. The professional faculties alone have followers and are inspired by the presence of interested hearers. The other faculties have no hold upon the students; they have scarcely any relation with them; they have no interest in the increase of their number, and therefore in encouraging their attendance. The faculties are isolated. No common purposes can be developed among the professors of the faculties of letters and of the sciences.

In France, save at Paris, in France, in the country of Burnouf, there is not a chair of philology; in the country of Champollion there is not a chair of epigraphy or of archaeology; in the country of Cuvier there is not a chair of paleontology.

If we consider not the organization only, but the spirit of the instruction, we find even a worse state. As a consequence of the incessant surveillance of officials every new doctrine, every original idea is prescribed.

From this barren state the faculties have been raised to organized and vigorous life. The work was begun by increasing the State appropriations, which were until recently the only dependence of higher education. Within two decades their

amount was doubled, rising from \$1,157,773 in 1870 to \$2,797,071 in 1889, to \$3,000,000 in 1900. Buildings have been erected on which the States and cities have spent about \$2,000,000. In 1885 two important decrees were issued. The one authorized the faculties to hold property, receive gifts, and manage their own estates; the other began the work of internal organization by the constitution of a general council in each group of faculties having control of their common interests, and a council of each individual faculty charged with special interests. These measures culminated in the law of 1890, which gave legal sanction and permanency to the changes already accomplished.

Article I of the law declares that "the universities are public establishments of higher education, whose purpose is instruction and culture by all the sciences (*l'ensemble des sciences*). " "They are civil personalities." They are named from the cities in which they are located. Article II defines the scope of a university: "A university must comprise at least the four faculties of law, medicine, sciences, and letters; other establishments of superior instruction may also be incorporated with it at the instance of the minister." Under this law fifteen of the faculty groups have already been transformed into universities having the measure of independence that is compatible with the unity of the State system. The rulings of the university council are subject to the approval of the minister of public instruction. The intermediary between the minister and the university is the rector, whom the former appoints.

The present sources of income for the universities are gifts and bequests of private individuals, societies, and local administrators, fees, and state appropriations. The control of gifts and legacies is vested in the council of the universities. The receipts from tuition fees and the state appropriations are managed as heretofore—by special agents appointed by the minister of finance. The report of these operations must be submitted each year as a part of the report of the expenditures of the department of public instruction.

It should be noted also that every organization whose contributions to the support of the university are accepted may be represented in the sessions of the university councils in which the financial affairs and the annual reports upon the state of instruction are discussed. Cities may be represented by their mayors, departments by the presidents of their councils, etc. Thus the sense of a common interest and responsibility is stimulated.

The following details relative to the development of the reorganized universities are drawn from the report of the chairman of the financial committee of the chamber of deputies (M. Perreau), 1901:

The faculties of medicine have been provided with physical, chemical, and bacteriological laboratories. In the faculties of law the introduction of studies relating to historic, political, and economic sciences has greatly enlarged the views of students, who were formerly too much absorbed in the mere mastery of prescribed texts. The faculties of science have had still greater development as regards both curriculum and laboratory equipments.

Thus (says M. Perreau) has been realized the saying of Virchow, that "the end of higher education is the acquisition of general culture with the addition of a particular specialty." The growth has not been at the expense of practical education. This has simply become more scientific. The faculties of all orders have not ceased to be professional schools while becoming, in the true sense of the word, scientific schools. Indeed, since the organization of local (regional) universities, it seems that the relation between science and practice in the domain of higher education has become more intimate and constant. Everywhere, beside theoretic instruction of the most elevated order, has been established instruction in the applications of science.

Invested with civil personality and endowed with financial autonomy, the universities have created institutes, courses, and laboratories for instruction in industrial and agricultural chemistry, applied mechanics, electricity, bacteriology, and for analysis, experiments, and research under the direction of distinguished mas-

ters. They have attracted a new clientèle which does not disdain either the special certificates (certificats d'études) nor the technical diplomas which are much appreciated in industry.

The following are cited by M. Perreau as notable examples of this development:

At Lyon, where there is already a flourishing school of industrial chemistry, the university is about to found a school of tannery.

"The foundation of this school," writes the secretary, "marks a forward step in the university. It has not been taken solely with reference to the interests of the immediate neighborhood, but with reference also to the general interests of the tannery industry in France. The creation of the school was determined and in a measure supported by the general syndicate of the industry of hides and leathers in France.

"The founders have had in view not simply a technical school, but an institute of higher education of a special order intended to form directors of tannery works able to conduct and to perfect the fabrication of leather. Besides instruction in general chemistry, which they share in common with the students in the school of industrial chemistry, the students of the tannery school follow during their two years' attendance a special course directed to the end which they have in view. This course includes chemistry as applied to tannery, natural history, the technology of hides and leathers, and the approved methods of analysis applied to the materials and the products of this particular industry.

"As it is organized this school will soon rival, it is believed, the old and prosperous schools at Freiburg, Saxony, and Leeds, England."

In another order of ideas (continues M. Perreau) the University of Lyon has just opened a school for notaries, in which civil and commercial law are studied in their special relations to the functions of a notary, acts of registration, and stamp duties. To this instruction are added practical lectures upon particular cases, legal documents, etc.

In 1889 the University of Nancy, by the aid of local appropriations, founded a chemical institute for instruction in the theory and applications of the different branches of chemistry. The number of students, which at the opening of the school was only 11, had risen to 29 in 1895 and to 94 in 1900. All these students have either entered into industry or are intending to do so. In 1892 the same university added to the technical institute a laboratory of brewery, which soon developed into a veritable school. Its purpose is to impart the scientific knowledge necessary for conducting a brewery either as a technical expert, chief, or foreman. Besides the theoretic instruction, practical studies of the processes of the manufacture have a large place in the programme of the school. Each year the school receives about 30 students—sons of brewers, or foremen in breweries—and it renders invaluable service to this branch of French industry. Before the school was founded, young Frenchmen of the eastern departments were obliged to go to Germany for their scientific and technical training, and it was to Germany also that the brewers looked for the directions and processes applicable to their industry. Now they look to Nancy, and the opposition which the school at first encountered has given way to the most absolute confidence.

The University of Nancy also founded in 1899 new laboratories of physical chemistry, of electrical chemistry, of dyeing, of printing, and of electricity. Through the successful efforts of two learned professors, M. Bichat, dean of the faculty of science, and M. Haller, director of the chemical institute, funds to the amount of 300,000 francs (\$60,000) for the construction and equipment of certain of these laboratories were obtained from the neighboring manufacturers.

The University of Dijon contemplates the creation of an institute of wine making and grape culture, as well as a complete commercial course, including scientific and legal branches. * * * In giving their instruction a more scientific tendency (says M. Perreau) the faculties have not ceased to be truly professional bodies. They do not, however, rest content with being sources of science; they have become, in addition, sources of wealth, and the efforts which the public authorities have made in their interests have resulted in increasing the renown of France and the prosperity of the national industry.

M. Perreau closes this survey with a list of institutes, laboratories, and other technical or industrial establishments attached to the faculties and universities, which is here reproduced:

University of Paris.—(Faculty of sciences) School of applied chemistry (rue Michelst). Three laboratories of maritime zoology, viz: Laboratory Arago at Banyuls-sur-Mer (Pyrénées Orientales); laboratory at Roscoff (Finistère); laboratory of maritime zoology at Wimereux (Pas-de-Calais) pertaining to the chair of the evo-

lution of organized beings, founded by the city of Paris, auxiliary to the faculty of sciences; archaeological museum of the University of Paris (at the Sorbonne, faculty of letters); colonial and geographic museum.

University of Aix-Marseille.—Laboratory of maritime zoology at Endoume (near Marseille), attached to the faculty of sciences. Colonial Institute at Marseille, faculty of sciences.

University of Besançon.—Experimental station, faculty of sciences.

University of Bordeaux.—Faculty of sciences, two laboratories, viz: Laboratory of agricultural and of industrial chemistry; laboratory of industrial electricity; archaeological museum (faculty of letters).

University of Caen.—Laboratory of maritime zoology, Luc-sur-mer (faculty of sciences).

University of Clermont.—Laboratory recently established at Besse (Puy-de-Dôme) for the study of the flora and fauna of the mountains and lakes of Auvergne. Laboratory of industrial electricity.

University of Dijon.—Faculty of sciences: Laboratory of industrial physics, laboratory of chemical analysis, and laboratory of bacteriology. (The two latter laboratories, though attached to the faculty of sciences, are entirely supported by the city of Dijon.)

University of Grenoble.—Electro-technic institute, faculty of sciences.

University of Lille.—Institute of applied chemistry; institute of industrial physics; laboratory of maritime zoology at Portel (Pas-de-Calais), the foregoing pertaining to the university; laboratory of agricultural chemistry (faculty of sciences); archaeological museum of the university (at the faculty of letters).

University of Lyon.—Institute of chemistry with school of industrial chemistry; laboratory of maritime physiology; Institute Michel Pacha at Tamaris (Var), dependent upon the university; archaeological museum of the university (at the faculty of letters); school of tannery; school for notaries (faculty of law).

University of Montpellier.—Institute of chemistry; of physics; of zoology; of botany; botanical garden (all annexes of the university); station of maritime zoology (at Cette); archaeological museum of the university (at the faculty of letters).

University of Nancy.—Institute of chemistry; of technical electricity; of serum therapy (all annexes of the university); brewery school (faculty of sciences).

University of Poitiers.—Laboratory of agricultural analyses (faculty of sciences).

University of Toulouse.—Laboratory of agricultural and industrial chemistry.

ADMISSION OF FOREIGN STUDENTS TO FRENCH UNIVERSITIES.

The recent efforts that have facilitated the admission of foreign students to the French universities have been set forth in full in previous Reports.¹ It will suffice to note here that a committee was formed in Paris in 1895 (Comité Franco-Américain), with an advisory branch in Washington, whose purpose it was to familiarize American students with the facilities for advanced study offered by the French universities and with the conditions for admission to the same.

Few foreign students, and especially few American students, were attracted to the French universities because of the difficulty in securing a degree. The German doctorate, on the contrary, could be gained with comparative ease. As pointed out by Professor Furber, of Chicago, to whose efforts the new arrangements are chiefly due:

There was an organic difference in the nature of the German and the French degrees. In Germany the doctorate carried with it no professional prerogatives. Not without further qualifications and severe examinations could the student obtain from the State the license permitting him to practice a profession. In France, on the contrary, the degrees were given, not by the university, but by the State, and clothed the recipient with special immunities and rights. The *licencié en droit* could enter on his legal duties. The doctor of medicine was already a physician, while the license of the other faculties opened public careers in various directions. To render degrees more accessible to foreigners was, therefore, to subject the native youth to sharper competition in acquiring a livelihood, a competition in which, because of his military duties, the Frenchman was at a disadvantage on his own soil. It was due, in fact, to this consideration that at the very

¹ See in particular Report for 1894-95, vol. 2, p. 305; Report for 1896-97, vol. 1, p. 33 et seq.; Report for 1897-98, vol. 1, pp. 749-759; Report for 1898-99, vol. 1, pp. 1091-1095.

time the friends of a more liberal hospitality were endeavoring to secure the foreign student greater privileges, a counter agitation was developed which aimed at curtailing those that he already had.

The arrangements ultimately proposed by the Comité Franco-American harmonized all these interests. It was, in fact, the creation of a new university doctorate, which was sanctioned by a ministerial decree of July 21, 1897, in the following terms:

Besides the degrees established by the State, the universities are empowered to institute titles of a nature purely scientific.

These titles shall confer none of the rights and privileges attached by law and regulations to the (State) degrees and in no case shall be declared a substitute. The studies and examinations which shall determine their distribution shall be subject to regulations formulated by the council of the university and approved by the standing committee of the superior council of public instruction. The diploma shall be delivered, in the name of the university, by the president of the council in forms different from the forms of those delivered by the Government.

The doctorates and diplomas created under this decree and available for foreigners are as follows:

University of Paris: Doctorate of letters, sciences, medicine, pharmacy, Protestant theology. (The university doctorate has not yet been adopted for law.) Also diploma of pharmacy and certificate of French language and literature.

University of Besançon: Doctorate of letters and of sciences; also diploma of agriculture.

University of Bordeaux: Doctorate of sciences, medicine, pharmacy, letters; also diploma of pharmacy.

University of Caen: Doctorate of law (also diploma of and certificate of higher literary studies; act November 19, 1886).

University of Dijon: Licentiate in law; doctorate of laws.

University of Grenoble: Doctorate of letters, law, sciences; also diploma for electro-technical subjects and diploma of French language and literature.

University of Lille: Doctorate of medicine; also diploma of French language and literature.

University of Lyon: Doctorate of medicine, pharmacy, sciences, letters; also diploma of pharmacy; of electro-technical studies; of agriculture; of oratory; of pedagogy; French letters.

University of Montpellier: Doctorate of pharmacy; of medicine; of law; also diploma of legal studies.

University of Nancy: Doctorate of law, sciences, pharmacy.

The following statement of the expenses to be met by candidates for the doctorate of the University of Paris is furnished by M. Henri Bréal, corresponding secretary of the Franco-American committee:

Faculty of Protestant theology:	Francs. ¹
4 inscriptions quarterly of 30 francs each.....	120
4 quarterly fees of 2.50 francs.....	10
Examination fees.....	110
Total.....	240
Faculty of sciences:	
Annual matriculation.....	20
Annual fees for library.....	10
4 quarterly fees for laboratory from 50 to 200 francs.....	200 or 800
Examination fees.....	140

¹A franc is ordinarily reckoned at 20 cents, or 5 francs to \$1, but the exact rate of exchange is at present 19.3 cents per franc.

The total depends on the fees for laboratories and on the number of years of study.

Faculty of letters:	Francs.
2 annual matriculations of 20 francs	40
2 annual fees for library of 10 francs	20
Examination fees	140
Total if the doctorate is taken in one year	200
Faculty of medicine:	
16 quarterly subscriptions of 30 francs	480
16 fees for library of 2.50 francs	40
16 fees for practical exercises of 15 francs	240
3 examination fees of 80 francs	640
Total	1,400
Faculty of pharmacy:	
Annual matriculation	20
Annual fees for library	10
4 quarterly fees for laboratories of 150 francs	600
Examination fees	100
Total if the doctorate is taken in one year	730

CONSPECTUS OF COURSES OF STUDY IN THE UNIVERSITY OF PARIS.¹

The University of Paris includes five faculties, viz. letters, sciences, law, Protestant theology, and medicine, and a higher school of pharmacy, equivalent to a faculty.

The faculty of letters (Sorbonne) comprises at present the following professorships, complementary courses, and lectureships:

Professorships.—Philosophy, history of ancient philosophy, history of modern philosophy, Greek eloquence, Greek poetry, Latin eloquence, Latin poetry, French literature in the Middle Ages and history of the French language, French eloquence, French poetry, foreign literature, literatures of southern Europe, ancient history, history of the Middle Ages, modern history, modern and contemporary history, history of the French Revolution, geography, colonial geography, archeology, Sanscrit and comparative grammar of the Indo-European languages, science of education, French literature, English tongue and literature, history, Greek language and literature.

Complementary courses.—Philosophy, history of social economy, history of political doctrines, romance philology, French literature, sciences auxiliary to history, history of French art, ancient history of eastern peoples, Latin language and literature, paleographic classic Latin, English language and literature, experimental psychology.

Lectures.—Philosophy, Greek language and literature, Latin language and literature, Latin language, grammar and philology, French literature, German language and literature, English language and literature, geography, classical paleography, pedagogy (historic.)

The faculty of sciences comprises professorships, annexed courses, and lectureships as follows:

Professorships.—Higher geometry, higher analysis and higher algebra, differential and integral calculus, mathematical astronomy and celestial mechanics,

¹ Statistique de l'enseignement supérieur, 1900, pp. 3-8.

rational mechanics, physical astronomy, calculus of probabilities and mathematical physics, physical and experimental mechanics, physics (two chairs), general chemistry (two chairs), organic chemistry, biological chemistry, comparative zoology, anatomy and physiology, evolution of organized being, zoology, botany, physical geography, mineralogy, geology, physiology.

Annexed courses.—Elements of analysis and mechanics, mathematical astronomy and celestial mechanics, physics (three courses), physical chemistry, analytical chemistry, animal histology; also 16 courses of lectures.

The faculty of law comprises:

Professorships.—Civil law (6 chairs), Roman law (8 chairs), criminal legislation and procedure, criminal law and penal legislation (comparative), civil procedure, commercial law, commercial maritime law and commercial legislation (comparative), history of law, history of Roman and of French law, common law, pandects, general public law, international law, constitutional law, administrative law (2 chairs), political economy, financial science, statistics, international law, public and private, Mussulman law.

The faculty of Protestant theology comprises:

Professorships.—Lutheran dogma, Reformed dogma, Evangelical ethics, Exegesis and criticism of the New Testament, ecclesiastical history, practical theology.

Free courses.—Complementary course, exegesis and criticism of the Old Testament.

Lectures.—Patristics, history of philosophy, German theological language and literature, ecclesiastical history.

The faculty of medicine, Rue et Place de l'École de Médecine, comprises 34 chairs or professorships and 4 complementary courses. The lectures of the professors are supplemented by the specialized instruction of 38 agrégés—a class of highly trained specialists.

There are also 16 directors of clinics, which are held in the hospitals for which the city is famous, and 37 directors of laboratory work with a large body of assistants.

The Superior School of Pharmacy (Avenue de l'Observatoire, 4) comprises 12 professorships. In addition to the general courses for which these provide, there are 7 agrégés or special professors, 4 directors of laboratory work, and a large corps of laboratory assistants.

The university doctorate authorized by law and open alike to natives and to foreigners has been created by the University of Paris in all the faculties excepting that of law. The conditions on which the degree may be obtained in the several faculties are as follows:¹

Faculty of letters, university doctorate.—At the faculty of letters the candidates for the university doctorate of Paris must, if they are French, have the diploma of licencié-ès-lettres. The faculty can, however, accord a dispensation in consideration of other titles they may possess. If the candidates are foreigners, this diploma may be dispensed with on the presentation of credentials of which the faculty remains judge.

The time given to preparation must extend over at least four half yearly terms.

The studies may be carried on partly in one of the great scientific establishments of Paris, in a French university, or even in a foreign university. Their duration may be abridged by decision of the faculty.

The tests include: First degree, maintenance of thesis, written either in French or in Latin; second degree, interrogations on questions chosen by the candidates and accepted by the faculty (regulation of the 28th of March, 1898).

¹ The Universities of France, published by the Franco-American Committee, pp. 45-53.

Faculty of sciences.—To obtain the doctorate at the faculty of science the candidates must produce two of the following certificates of higher studies:¹

1, differential and integral calculus; 2, rational mechanics; 3, astronomy; 4, higher analysis; 6, celestial mechanics; 7, mathematical physics; 8, physical and experimental mechanics; 9, general physics; 10, general chemistry; 11, mineralogy; 12, biological chemistry; 13, zoology; 14, botany; 15, geology; 16, general physiology; 17, physical geography.

The faculty reserves the right of accepting equivalents.

The length of time devoted to study is a year. The studies may be pursued either at the faculty or in one of the scientific establishments of Paris.

The tests include the public discussion of a thesis setting forth the candidate's personal investigations and interrogations on different questions proposed by the faculty.

Faculty of Protestant theology.—Duration of studies: To be determined by the faculty (minimum, one year).

Conditions of education: A proof to be given during the time of study of knowledge which is equivalent to the licence en théologie, and credentials of previous secondary and higher studies by certificates from foreign universities, or equivalent proof by the student's own works. The licence requires a sufficient knowledge of the following subjects: Dogma and history of dogmas; evangelical ethics; exegesis and criticism of the Old and New Testaments; ecclesiastical history and practical theology. A knowledge of German enters into the licence programme. The doctorate examination is composed, beside the colloquium doctrine, in which the candidate will give proof of necessary knowledge, of the public discussion of a thesis, printed in French or in Latin, on a subject which should previously have received the approbation of the faculty.

Faculty of medicine.—At the Paris faculty of medicine, the diploma of "doctor of the University of Paris" is delivered to foreign students who are, in virtue of a dispensation, allowed to pursue their studies and undergo their examinations without passing by the bachelor's degree. This title confers none of the rights or privileges attached to a degree and can not in any case be accepted as an equivalent to the degree of doctor of medicine. The diploma is delivered under the seal and in the name of the University of Paris by the president of the university council. (Regulations of March 28, and April 1, 1898.)

The requirements are four years of resident study (the duration may be reduced according to the candidate's ability), five examinations, and a written thesis on a subject chosen by the candidate.

School of pharmacy.—"At the higher school of pharmacy the candidates for the doctorate of the University of Paris, must, if they are French, produce the diploma of first-class pharmaceutical chemist; if they are foreigners, two study certificates, the first of studies in chemical pharmacy and toxicology, the second of studies in galenic pharmacy and materia medica.

"The school reserves the right of accepting equivalents.

¹ Certificates of higher studies. The examination seasons are held twice a year, in July and at the beginning of the scholastic year.

No unsuccessful candidate can present himself before another faculty during the same session for the same certificate.

The examinations for each certificate include three tests: A written test, a viva voce test, a practical test.

The two first tests are eliminatory. The jury is composed of at least three members. The marks obtained by the candidates in the viva voce examination and practical exercises are communicated to the jury, who take them into account in their appreciation. The admissibility, admission, and postponement are pronounced by the jury after deliberations.

According to the terms of article 3 of the decree of January 22, 1896, three of the certificates mentioned above confer the diploma of licencié-ès-sciences.

"The period of study extends over a year at least and takes place at the school.

"The test consists in discussion of a thesis embodying personal researches."
(Regulation of March 28, 1898.)

*Higher technical schools under other ministries than that of public instruction
(ministry of agriculture, of commerce, of war, etc.).*

Institutions.	No. of students.	Budget (State appropriation).
		<i>Francs.</i>
Conservatoire National des Arts et Métiers, Paris		500,000
École des Hautes Études Commerciales	¹ 150	
Institut National Agronomique, Paris	200	330,775
École Vétérinaire, Alfort	294	440,000
École Nationale d'Agriculture, Grignon	120	
École Nationale d'Agriculture, Montpellier	200	
École Nationale d'Agriculture, Rennes	118	
École Polytechnique, Paris	472	1,300,000
École Supérieure de Guerre	¹ 250	
École Spéciale Militaire, St. Cyr (ministry of war)	¹ 520	
École Navale, Brest	¹ 100	
École Nationale Supérieure des Mines, Paris	146	167,000
École Nationale des Ponts et Chaussées, Paris	118	355,000
École Coloniale	¹ 46	

¹ Admitted in 1900.

The independent or private school of political sciences (École Libre des Sciences Politiques) Paris, registered 600 students in 1901.

INTERNATIONAL CORRESPONDENCE OF STUDENTS.

The idea of organizing on a large scale a system of international correspondence between students was started in 1896 by M. Mieille, who had previously had wide experience as a professor in a normal school, Draguignan, France. For several years M. Mieille, with the help of English friends, had maintained an exchange of letters between his own pupils and some English students, which had proved a great help to both in the acquisition of the foreign tongue. His plan for the work on the larger scale, based upon this successful experiment, immediately gained the cooperation of Mr. Stead, in England, and of the editor of the *Revue Universitaire*, France, who agreed to collect names in their respective countries. Professor Hartmann, of Germany, was similarly enlisted for that country.

The following statement by the English secretary for international correspondence shows the extent of the work during the four years from its announcement in January, 1897, to Easter, 1901:

The statistics presented may not be quite accurate. I have been more engrossed by the care of putting my friends into communication with one another than by counting them. Including Danes, Dutch, Italians, etc., with English-speaking peoples, French, and Germans put into correspondence, the totals for the four years are, roughly—

English boys	2,887
English girls	1,613
Total number of scholars	9,000
Largest list in any one month	480

During the same time the adults of all countries put into correspondence have numbered 4,400.

RULES FOR THE MANAGEMENT OF THE SCHOLARS' INTERNATIONAL CORRESPONDENCE.

I. The exchange of letters is always and everywhere under the supervision of the foreign language teacher. All foreign letters and other postal communications

are under his control. If possible, the scholar, from the beginning of the correspondence, should enter copies of the letters he writes in a book, and thus be able to show or refer to them when necessary.

II. Teachers should only send in the names of those among their scholars who are trustworthy and whose parents have sent either oral or written permission. They must also be able to write their own language correctly and have some knowledge of the foreign tongue. It should be explained to the scholars that they should not write anything which may dishonor themselves, their school, or their country, and therefore political and religious questions are better avoided.

III. The names of scholars, with age of each, must be sent by their teachers or parents, and letters will be addressed to the school. In the case of French correspondents names of boys are printed in the *Revue Universitaire*, and the French boy writes first. Lists are sent over the 1st of each school month, and the foreign introductory letter should be received about the 20th. If no such letter come, teachers are asked to send a post card to Mowbray House before the 30th. Girls' names are not printed, but lists are filled up from time to time, and names are selected as age and circumstances correspond with the names sent from France.

As regards German correspondents, the occupation of parent must be given and a 2d. stamp sent with each name.

If by mischance a scholar receives two letters, the teacher is asked to arrange that some other suitable scholar respond, or else to send the letter on to Mowbray House. Should the teacher consider a rearrangement of letters necessary, he is quite free so to do, and, if needful, a scholar's name may be sent in again and again, provided that due notice is given and that the foreign partner's interests are considered.

IV. The German bureau asks that younger correspondents should write chiefly or only in their mother tongue.

V. The rule is that the scholar should write alternately in his own and the foreign language, but the first letter should always be in his own tongue and written with great care, as a satisfactory development depends largely upon the first impression received.

VI. As the letters in the mother tongue are intended as models for the partner, they must be written with care and must be grammatically correct. The scholar should endeavor to find something of interest to tell his friend. Questions should be asked and answered, and a helpful bond of union thus be formed. Courtesy and sympathy are imperative.

VII. The teacher or parent is asked to help in finding materials for letters. In some cases teachers have planned a series of letters, and have written suggestions each month on the blackboard.

VIII. It is advisable that letters received in the foreign tongue should be entered in a note book; at any rate, all unknown or idiomatic expressions should be thus noted.

Foreign letters are often useful in class teaching.

IX. Teachers are asked to tell us about any which are of unusual interest, and we hope we may be permitted to see copies of such.

X. The mistakes in English of the foreign writers must be carefully corrected by the partner, in English, and returned with his answer. Younger scholars need help in doing this, for the more the correction can be made to illustrate idioms and peculiarities the better for both partners.

XI. The time for the exchange of letters is subject to arrangement, but as regularity and frequency are imperative, letters must be exchanged once a month at least and a bimonthly arrangement is the rule. Every letter should be dated, and the date of receipt of letter which is being answered should be given.

XII. To avoid delay, care should be taken in addressing the letters in plain handwriting. The address of sender should also be clearly written and the full name given. Fancy handwriting has been the cause of many an undelivered letter. Scholars should carefully keep the address of partner as it is given in the first letter; it may not be repeated. Remember also that only one-half an ounce can be sent for 2½ pence.

XIII. If for any reason a scholar who has sent in his name no longer wishes to correspond, he must at once let us know, sending the name and address of his correspondent; simple politeness demands this. If he receives a letter and does not wish to reply, the letter itself should at once be sent to Mowbray House. To leave the partner to wait in uncertainty is a rudeness of which we hope no one will be guilty.

XIV. If for any reason the foreign partner discontinues writing, the scholar's name will again be placed on our lists. One from another part of the country will then be selected. A change of this kind is sometimes desired by both partners, and teachers are asked to inform us when this is the case.

XV. Illustrated post cards may be exchanged on condition that the sender describes the picture fully in his own language, but such exchanges are not to take the place of letters. Comic post cards and newspapers with caricatures give rise to misunderstandings, and therefore should not be sent. But in this, as in all things, the teacher is the judge.

All English letters should be addressed to the office of the Review of Reviews and indorsed "Secretary for international correspondence."

The addresses for the remaining countries enlisted in the work are as follows:

France.—Le Directeur de la Revue Universitaire, 5, rue de Mezières, Paris M. Mouchet, 203, rue de Becon, Courbevoie.

Germany.—Prof. Martin Hartmann, Deutsche Centralstelle für international Briefwechsel, Fechnerstrasse, 2 Leipzig.

Canada.—Mr. W. McLay, Macmaster University, Toronto, Canada.

United States.—Mr. E. Magill, Swarthmore College, Swarthmore, Pa.

INSTRUCTION IN MORALS (LA MORALE) IN THE PRIMARY SCHOOLS OF FRANCE.

The most significant movement in the recent history of primary education in France is the impulse given to instruction in morals or practical ethics.

The subject is not new; it is found in school programmes that antedate the Republic, but always in relation with religion. By the law of 1882 the State schools were made strictly secular, but at the same time morals and civics were placed at the head of the prescribed studies. For a long time, however, these branches were taught in a formal memoriter manner and with meager results, as was shown by a report on the subject prepared for the Exposition of 1889.¹ The report itself undoubtedly conduced to the improvement of this instruction, but the change is more directly traceable to external pressure. The secular public school has encountered the bitter hostility of the church or the powerful teaching orders. It has been represented as godless and immoral, and as the active cause of an alleged increase in juvenile crime. These charges have put the Government upon the defensive; the spirit and methods of the school have been freely discussed, and the whole body of public school officials, inspectors, and teachers alike have been fired with patriotic zeal to vindicate the character of their work. Meanwhile another influence had been gradually leading to the same end. Jules Ferry, who has been called the father of the secular school in France, reiterated again and again in his speeches before the chambers his purpose of making the secular school moral. The sincerity of these declarations was proved by his appointment to positions of highest influence three men peculiarly fitted to accomplish this purpose. Called to the ministry of public instruction in 1879, one of his first acts was the appointment of M. Buisson as director of primary education. Before the year closed the minister had established the normal school at Fontenay-aux-Roses to prepare teachers for the primary normal schools for women, and placed it in charge of M. Pécaut; shortly after the minister laid the foundations of the chair of pedagogy at the Sorbonne, and appointed to the same M. Marion.

These three men, distinguished masters of ethical teaching,² have profoundly impressed the whole body of French teachers, and from their high positions an influence has gone forth which has penetrated to every hamlet of France. As a

¹ "L'éducation morale dans les écoles primaires," by M. F. Lichtenberger, Doyen de la Faculté de Théologie Protestante de Paris. Recueil des Monographies Pédagogiques, Tome iv.

² In this connection see, in particular Buisson's *La Religion, la morale, et la science—leur conflit dans l'éducation contemporaine*. Pécaut's *Études au jour le jour sur l'éducation nationale*. Marion's *De la Solidarité morale*.

result of these influences, the one excited by external opposition, the other working harmoniously within the system, the primary school of France has undergone a subtle transformation within the past decade. The scientific spirit by which for a time its instruction was dominated has given way to the ethical spirit. The teaching of practical morals has become living and effective. It turns the child's thoughts inward and excites him to reflect upon his conscious experiences, his moral duties and destinies, and thus relieves, by an excitation of the sensibilities and the will, the extreme formality of the intellectual and industrial training. This ethical expansion of the school was emphasized in many ways by the Exposition of 1900 and received special recognition from the jury of awards, who unanimously voted a grand prize for the system of moral instruction. The radical change which it implies was aptly characterized by the English member of the jury, who had made personal observation of its application in schools of an extended portion of France:

Probably the world has never witnessed [he says] a more astonishing revolution than the apparently successful effort to raise, lift, and shift the entire national education from a Catholic to a merely ethical foundation, and that, apparently, with no net loss to the education of the country, but with even a considerable gain. Such an astonishing feat can be paralleled only by the engineering exploits you sometimes attempt in America when you raise a huge hotel upon rollers and transfer it to a new basis. Now, this ethical instruction is merely an attempt to "underpin" the old structure on its new foundation, and, as such, should have the sympathy of all.¹

The endeavor on the part of the French Government to develop a system of moral training entirely separated from religious faith and dogma will naturally be followed with great interest by educators in other countries.

It is obvious, however, that a system which works well with the French, and especially under the pressure of a conflict between church and state, can not be successfully copied by any other people. It is conditions peculiar to the French that have infused life into the instruction.

The most ardent advocates of moral instruction in the primary schools of France do not, however, delude themselves with the notion that this alone will suffice to make the people moral. The limitations of the school in this respect are ably set forth by M. F. Buisson in an article² from which the following is quoted:

The part of the school is rigidly limited for two reasons: On the one hand its duration is too brief; it covers only the earliest years. The impressions which it makes are, it is true, vivid and often ineffaceable, but they are only the impressions of childhood, and other impressions—the stronger impressions of youth and of adolescence—soon come to obscure them. A moral influence which ceases to operate the day after the child's confirmation may perhaps affect the child, but it can not form the man.

The influence ceases on the very day when should begin and when, in fact, for the children of the more favored classes, does begin that decisive culture whose impress will remain throughout life. On the other hand, the school is only one agent in the moral education of the young. If only this agent were assured of the cooperation of all the others! Generally it may expect their opposition. Is the school always seconded by the family? Is it ordinarily seconded by the church? Later will not other masters seek and perhaps easily obtain a greater influence over the youth than ever the teacher exercised over the child? The press (and often what a press!), the theater (but not the French theater), the street, the workshop, the saloon, the public ball or the concert café, the temptations of comrades, of example, of fashion, of juvenile bravado, the brutal impulse of passions, and, still later, that of selfish interests, at all ages the force of appetites which one after the other arise and drown the voice of reason; these are, indeed, other impulses than those of the school.

¹ Cloudesley Brereton, esq., vice-president of the international jury on primary education, Paris Exposition, in an address before the national council, Detroit, 1901.

² "L'école primaire en France et sa part de responsabilité dans l'éducation morale du pays." Jost's annuaire de l'enseignement primaire, 1898.

Poor school, how soon its effect is lost in the fading light of childhood! Later, indeed, it will be one of the dear remembrances of old age. There will come a time when memory will recall the old schoolroom, with its white walls, its black-board, its maps, the old seats; everything, even to the humblest details of the school life, will come back.

But this is not an influence; it will simply be a late and melancholy remembrance. Let us not exaggerate, then, the power which the school exercises. Leave to the enemies of the secular teacher, who for a long time contemptuously limited him to reading, writing, and arithmetic, leave to them the noisy pretension that he is accountable for the whole destiny of the nation, solely responsible for what the pupil may become when he is a man, although as a child he may have passed only a few months within the school walls. * * *

If there are, indeed, some men who sincerely believe in this stroke of a magical wand they ought to find out their error. They know now, and they have needed this lesson to teach them that a people can not be reformed in twelve or fourteen years nor by the primary school alone; they know that in order to modify traditions centuries old, supported by the authority of the church, of the state, of the family, infused into the very blood of the people through the innumerable currents of physical and moral heredity, something more is needed than two lines of a law voted by Parliament and two pages of programme signed by a minister.

For ourselves, we did not need this experience to convince us that the school could not accomplish more in fifteen years than the church did in fifteen centuries. We are not of those who, hardly arrived at the edge of the field that they are directed to sow, turn impatiently, expecting to see the grain already springing up behind them.

Does it follow, then, that the work once commenced there is nothing to hope for; that no encouraging results are yet to be seen? It is not to partisan journalists that we should look for evidence on this point, but rather to the testimony of the people. Consult them in the cities and in the villages and see if everywhere they do not tell you that the pupils leave our schools with a perceptible moral improvement.

The good sense of the common people estimates justly those paradoxes relative to the instruction which so delight certain circles. To-day, as formerly, the first service that the school renders and which is not questioned in the homes is that of imparting to the children habits of mind and of body, ways of acting and of speaking, ideas and sentiments which enable one to distinguish them at a glance from the untrained child. To deny this, is to deny what is evident.

In the same article in which this limitation of the primary school is set forth, M. Buisson explains also the present attitude of the State secular school toward moral instruction. This is a particular in respect to which the State school has been greatly misjudged; hence this exposition by one who has had an important part in determining its moral standpoint is essential to a just estimate of its social and historic value. M. Buisson approaches this division of his subject by a consideration of the origin of the notion of morality in the human mind. On this point he says, in part:

No morals without religion. This is the fundamental axiom so thoroughly accepted by the church that even those who have rejected its tutelage have unconsciously retained the axiom in the modified form—no morals without philosophy.

The truth is that religion and philosophy, instead of engendering the notion of morality, are derived from it. It is not because it teaches any doctrine as to the nature and attributes of God, or as to rewards and punishments beyond the tomb, or as to the origin of the universe, that man yields to the moral law and feels in his conscience the irresistible obligation to conform to it. It is, on the contrary, because the sense of this obligation proves to him the existence of a moral law that he is forced to admit that there is a lawgiver, that there is an absolute authority, that the universe is governed by infinite wisdom. These metaphysical consequences of the moral law once admitted, man, in obedience to the innate demand for unity and logic, coordinates them into a system which, under the form either of religion or of philosophy, sums them all up for him, enables him to represent to himself the universal order, responds to his questionings, justifies his hopes. How natural, then, for him to attribute great virtue to this system, to confound it with the moral law itself, and to regard it as the supreme instrument of moral instruction. In all times the moment a science is constituted the first movement of educators has been to give it ready-made to pupils, instead of showing them how it has been formed by obliging them to grope their way along by the slow and tedious process of experience.

Human morality is the fruit of prolonged human effort. It is not due either to a miracle or to an artifice. It springs, or rather, slowly emerges, from the very depths of our nature; it is evolved by long and painful efforts. * * * Morality is not achieved by one stroke; it is the result of all the little victories which man has gained over the brute within him. The history of the human conscience is the history of the conquests of the spirit over animality, of reason over passion, of will over appetite. Throughout the ages, in proportion as society passes from the savage to the civilized state, the moral conscience grows. To respect for force is opposed the respect for justice; two grand ideas essentially human, that of duty and that of right, illumine the darkness of the animal world. The distinction of good and of evil marks the advent of the human empire.

The written law expresses often only a minimum of the mutual obligations upon which men are agreed. Each holds himself bound by the unwritten but not less imperative law within his conscience; the feeling of moral obligation becomes ever more and more intense, precise, severe, scrupulous, and delicate, until there bursts upon the soul the full splendor of the ideal of moral perfection, which, though it despair of attaining, it must evermore pursue. * * *

Those who, like Kant, realize the majesty of the moral law, like him, also, feel the necessity of attaching the moral order to the universal order, and each, according to his intelligence, will endeavor also to find for himself a solution of the problem which has agitated so many great minds. What is there that can weaken these moral convictions? And in them one finds the joy of the spirit—a support and new encouragement in the path of virtue. A philosophic or religious theory is not the foundation of morality, but why should it not be its crown?

This is exactly the position of the French secular school on the question of moral education. What does the school really do? Its work is neither religious nor philosophic—its work is moral in the true and full sense of the word. Those who accuse it as destitute of faith utter nonsense; on the contrary, the very thing which causes this reproach is itself an act of faith—faith in human nature; faith in conscience (which certain people call the voice of God, and then reproach us for wishing to listen to it always and to respect it in preference to any other voice); faith in the absolute value of the moral law; faith in the good and the true; faith in duty even without punishment or reward, even without any other sanction than that of our own conscience.

Starting from this faith, not from this or that system or dogma, but from that which is the common source and the underlying reason of every system and every dogma, that is to say, starting from faith in the human soul and in its laws, the school takes the child just as he comes to it from contemporaneous society. It does not endeavor to make him reason about morality, but to fill him with the spirit and inspire him to the practice of morality. Aristotle long ago said: "Virtue is not a science, it is an art, it is a practice, it is an ensemble of habits." The secular school teaches morals not as something to be learned, but as something to be lived. For this it is not necessary to create a new theory, it is necessary only to gather up and to fix the ideas, the sentiments, the opinions, the principles, the moral postulates which are diffused as it were in the air we breathe, in the language we speak, in everything that expresses the public thought or conscience.

THE OFFICIAL PROGRAMME OF MORAL INSTRUCTION IN THE PRIMARY SCHOOLS OF FRANCE.

[Abridged from the original.]

(1) *General instructions and explanations—aims and characteristics.*—Moral instruction is intended to complete, to elevate, and to ennoble all the other instruction of the school. While each of the other branches tends to develop a special order of aptitudes or of useful knowledge, this study tends to develop the man himself; that is to say, his heart, his intelligence, his conscience; hence moral education moves on a different plane from the other subjects. Its force depends less upon the precision and logical relation of the truths taught than upon intensity of feeling, vividness of impressions, and the contagious ardor of conviction.

The aim of moral education is to cause one to will rather than to know; it arouses rather than demonstrates; it proceeds more from the feelings than from reasoning; it does not attempt to analyze all the reasons for a moral act, it seeks before all to produce it, to repeat it, to make of it a habit which will govern the life. In the elementary school it is not a science, but an art—the art of inclining the will toward the good.

The rôle of the teacher.—In respect to this subject as to the other branches of education, the teacher is regarded as the representative of society. It is of the highest importance to a democratic secular society that all its members should be initiated early, and by lessons which can not be effaced, into a feeling of their

dignity, and into a feeling not less deep of their duty and of their personal responsibility. To attain this end the teacher is not to proceed as if he were addressing children destitute of all previous knowledge of good and of evil; he will remember that the great majority of them have received or are receiving a religious instruction which familiarizes them with the idea of a God of the universe and a Father of men, with the traditions, the beliefs, the practices of a worship, either Christian or Jewish; that they have already received the fundamental ideas of a morality, eternal and universal; but these ideas are still with them in the germ. They await ripening and developing by appropriate culture and this culture it is for the teacher to give. His mission is, then, limited. He is to strengthen, to root into the minds of his pupils, for all their lives through daily practice, those essential notions of a morality common to all civilized men. He can do this without making personal reference to any of the religious beliefs with which his pupils associate and blend the general principles of morals. He takes the children as they come to him with their ideas and their language, with the beliefs which they have derived from their parents, and his only care is to teach them to draw from these that which is most precious from the social standpoint, namely, the precepts of a high morality.

Proper objects and limits of this instruction.—The moral teaching of the school is, then, distinguished from religious instruction without contradicting it. The teacher is neither a priest nor the father of a family; he joins his efforts to theirs to make each child an honest man. He should insist upon the duties which bring men together, and not upon the dogmas which separate them. He should aim to make all the children serve an effective apprenticeship to a moral life. Later in life they will perhaps become separated by dogmatic opinion, but they will be in accord in having the aim of life as high as possible; in having the same horror for what is base and vile, the same delicacy in the appreciation of duty, in aspiring to moral perfection, whatever effort it may cost, in feeling united in that fealty to the good, the beautiful, and the true, which is also a form, and not the least pure, of the religious sentiment.

Methods.—By his character, his conduct, his example, the teacher should be the most persuasive of examples. In moral instruction what does not come from the heart does not go to the heart. A master who recites precepts, who speaks of duty without convictions, without warmth, does much worse than waste his efforts. He is altogether wrong. A course of morals which is regular, but cold, commonplace, dry, does not teach morals, because it does not develop a love for the subject. The simplest recital in which the child can catch an accent of gravity, a single sincere word, is worth more than a long succession of mechanical lessons.

On the other hand, it is hardly necessary to say, the teacher should carefully avoid any reflection either by language or expression upon the religious beliefs of the children confided to his care, anything that might betray on his part any lack of respect or of regard for the opinions of others.

The only obligation imposed upon the teacher, and this is compatible with a respect for all convictions, is to watch in a practical and paternal manner the moral development of his pupils with the same solicitude with which he follows their progress in scholarship. He should not believe himself free from responsibilities toward any of them if he has not done as much for the education of character as for that of the intellect. At this price alone will the teacher have merited the title of educator and elementary instruction the name of liberal education.

THE PROGRAMME.

Infant section: Ages 5 to 7 years.—Very simple talks mingled with all the exercises of the class and of recreation. Simple poems explained and learned by heart; stories; songs. Special care by the teacher in regard to children showing any defect in character or any vicious tendency.

Primary section: Ages 7 to 9 years.—Familiar conversations, readings (examples, precepts, parables). Practical exercises tending to moral activity in the class itself: 1. By observation of individual character, the gentle correction of faults, and the development of good qualities. 2. By the intelligent appreciation of school discipline as a means of education. 3. By appeal to the feelings and moral judgment of the child himself. 4. By the correction of vulgar notions, of prejudices, and of superstitions. 5. By instruction drawn from facts observed by the pupils themselves.

Intermediate section: Ages 9 to 11 years.—Familiar talks, reading illustrative examples with comments, practical exercises as in the elementary section, but with a little more method and precision.

I. (a) The child in the family: Duties toward parents and grandparents: Obedience, respect, love, recognition; aiding parents in their work, tending them in sickness, caring for them in their old age.

Duties of brothers and sisters: Loving each other; watchful care of the elder over the younger; effect of example.

Duties toward servants: To treat them with politeness and with kindness.

(b) The child in the school: Earnestness, docility, industry, civility. Duties toward the teacher. Duties toward comrades.

(c) The country: Grandeur and misfortunes of France. Duties toward the country and society.

II. Duties toward one's self: Care of the body; cleanliness, sobriety, and temperance; dangers of drunkenness; gymnastics.

Use and care of property: Economy; avoiding debts; effects of gambling, prodigality, avarice, etc.

The soul: Veracity and sincerity; personal dignity and self-respect; modesty; recognition of one's own faults; evils of pride, vanity, coquetry, frivolity; shame of ignorance and idleness; courage in peril and misfortune; patience; personal initiative; evils of anger.

Regard for animals: Kindness toward; society their natural protector.

Duties toward other men: Justice and charity; the Golden Rule; kindness, fraternity, tolerance, and respect for the beliefs of others.

(NOTE.—In all these considerations the teacher should assume the existence of conscience, of the moral law, and moral obligation. He should appeal to the feeling and the idea of duty and of responsibility. He should not attempt to demonstrate these by theoretic statements).

III. Duties toward God: The teacher is not required to give a course upon the nature and attributes of God. The instruction which he is to give to all without distinction is limited to two points: First, he teaches his pupil not to speak the name of God lightly. He clearly associates in their minds with the idea of the First Cause and of the Perfect Being a sentiment of respect and of veneration, the same as is associated with these ideas under the different aspects of their religious training.

Then, and without concerning himself with the prescriptions special to the different religious beliefs, the teacher will strive to have the child comprehend and feel that the first duty he owes to divinity is obedience to the laws of God, as revealed to him in his conscience and his reason.

Higher section: Ages 11 to 13 years.—Exercises on ideas of previous years continued and expounded; special development of social morality: 1. The family; 2. Society, justice, the conditions of all society; solidarity, fraternity (alcoholism; its destruction little by little of the social sentiments by destroying the power of the will and the feeling of personal responsibility); development of the idea of the native land; the duties of the citizen (obedience to the laws, the military service, discipline, devotion, fidelity to the flag); imposts (condemnation of fraud toward the State); the ballot (it is a moral obligation; it ought to be free, conscientious, disinterested, enlightened); rights corresponding to these duties: Personal liberty, liberty of conscience, liberty in respect to work, in respect to association: general security of life and property: the national sovereignty; explanation of the republican motto, "Liberty, equality, fraternity."

"Under each head of the course in social morals the teacher should explain clearly, but without entering into metaphysical discussions: (1) The difference between duty and interest, even when they seem to be confounded with each other; that is to say, the imperative and disinterested nature of duty; (2) the distinction between the written and the moral law; the one fixes a minimum of prescriptions that society imposes upon all its members under definite penalties for violations of the same; the other imposes upon each one in his secret conscience a duty which no one obliges him to fulfill, but which he can not neglect without the sense of a wrong to himself and to God."

JUVENILE CRIME.

The recent efforts to make moral instruction prominent and forceful in the primary schools are due in a measure to alarming reports of the increase in juvenile crime. These reports were based chiefly upon criminal statistics relating to the period 1880 to 1886, which showed an increase in crime over the period 1876 to 1880. Thus, according to M. Levasseur, the mean annual number of persons convicted of crime in the period 1876 to 1880 was 4,374. In the period 1881-1885 the mean rose to 4,381.¹ The increase in the number accused of minor offenses was still more marked, rising from a mean annual of 140,167 in the decade 1871 to

¹See *La Population française*, vol. 2, p. 447.

1880 to 180,806 in the half decade 1881-1885 and to the mean annual of 189,655 in the succeeding three years, 1886-1888.¹ "The number of young delinquents," says M. Levasseur, "also augments and this precocity in crime is a cause of anxiety."² He notes further that the proportion of illiterate criminals had declined. This fact was not, however, misinterpreted by M. Levasseur. "It was," he observed, "a necessary consequence of the general diffusion of instruction."³

The statistics, however, were seized upon by the enemies of the State schools and by others either seriously alarmed at the revelations or eager for sensations, and the cry became general that secular education was undermining good morals. In fact, the State secular schools were not thoroughly organized until 1886, and were hardly to be counted as a national force before 1892. Later statistics indicate that the annual number of criminals is decreasing. Meanwhile serious investigations of the moral and criminal status of the French population have put the whole problem of juvenile crime in a new light. We present here citations from recent reports and discussions which summarize the results of these investigations.

The report of the minister of justice for the year 1896, published in 1899, presents the following statistics, showing the number of minors tried in the criminal courts at the dates specified:

	1866.	1876.	1886.	1892.	1893.	1894.	1895.	1896.
Number of accused under 16 years of age:								
Boys.....	29	30	23	24	24	29	19	17
Girls.....	15	16	4	11	3	3	6	6
Total.....	44	46	27	35	27	32	25	23
Number of accused between 16 and 21 years of age:								
Boys.....	637	686	535	541	601	556	465	477
Girls.....	95	129	106	111	79	115	89	72
Total.....	732	815	641	652	680	673	554	549

DECREASE IN NUMBER OF ACCUSED FROM 1876 TO 1896.

	Under 16 years of age.	Between 16 and 21 years of age.
Boys.....	Per cent. 43.3	Per cent. 30.4
Girls.....	62.5	44.2
Total.....	50	32.6

The same report showed also that the number of minors brought before the "correctional tribunals" (corresponding to our police courts) charged with minor offenses had been gradually decreasing. Under this head the following statistics are given:

	1892.	1893.	1894.	1895.	1896.
Number presented under 16 years of age:					
Boys.....	6,118	5,719	5,967	5,680	5,635
Girls.....	1,030	981	934	960	938
Total.....	7,148	6,700	6,901	6,640	6,573
Number presented between 16 and 21 years of age:					
Boys.....	27,744	28,350	28,701	27,261	27,044
Girls.....	3,479	3,532	3,616	3,502	3,336
Total.....	31,223	31,882	32,317	30,763	30,430

¹ See *La Population française*, vol. 2, p. 449.

² *Ibid*, p. 453.

³ *Ibid*, p. 465.

With respect to the literacy of criminals, the report presents detailed statistics showing the degree of instruction of persons convicted of homicides (including under this head assassination, murder, parricide, poisoning), rape of minors, and thefts and breaches of trust. Summarized, the facts are as follows:

Date.	Total number convicted.	Per cent unable to read or write.	Per cent able to read and write.	Per cent having higher attainments.
1872	3,967	36.45	70.28	2.27
1873	3,802	36.29	61.88	1.83
1874	3,596	37.01	60.70	2.29
1875	3,210	35.05	63.92	3.03
1876	3,236	31.70	64.77	3.53
Total for half decade	17,811	35.07	62.40	2.53
1892	2,775	19.38	76.72	.04
1893	2,891	17.15	80.35	2.50
1894	2,642	15.93	81.41	2.66
1895	2,582	16.54	80.68	2.78
1896	2,464	15.17	82.06	2.77
Total for half decade	13,154	16.89	80.80	2.86

The foregoing statistics bring into comparison the half decade preceding the establishment of the State secular schools with the half decade succeeding their complete organization. Considering the entire period, 1876 to 1896, it is seen that the number of convictions for the crimes specified decreased from 3,236 in 1876 to 2,464 in 1896, a decrease of 24 per cent.

By reference to the statistics relative to minors it will be seen that the decrease in the number of criminal minors during the same period (1876 to 1896) was relatively much greater, viz, for young men between 16 and 21 years of age, 30.4 per cent; for young women between 16 and 21 years, 44.2 per cent; for all between those ages, 32.6 per cent. For lads under 16 years of age there was a decrease of 43.3 per cent; for girls under 16, a decrease of 62.5 per cent; for all under 16, a decrease of 50 per cent. This is a very significant showing, because it relates to persons young enough to have received the full influence of the schools. The minister, in discussing these several tables, emphasizes their educational bearing:

The long-continued participation of minors in certain crimes, often the most atrocious crimes [he says], offers a serious consideration for the reformers of the prison system and the educators of the young. * * * But considering the annual total number of young people tried, the excitement that the question has raised in some quarters appears to be groundless.

With respect to the statistics of minors brought before the lower courts the minister notes:

Since 1894, when the maximum was reached, there has been a marked decrease in the number of prosecutions. It is true, however, that an analysis of the details shows a slight increase from 1895 to 1896 in the number of graver offenses. Thus the number accused of stealing, notably those from 16 to 21 years of age, increased from 9,589 in 1895 to 10,777 in 1896. But in 1892 the corresponding number was 11,027. There is also a somewhat marked increase in the number of youths between 16 and 21 years of age accused of murderous assaults, while on the other hand the number accused of indecent assaults varied but slightly throughout the decade 1886-1896. On the whole, there is a decline in juvenile crime, which, although slight, must be regarded as a favorable sign.

In discussing the detailed statistics of the literacy of criminals (all ages included) the minister observes "that the participation of persons completely illiterate in homicidal crimes has greatly decreased, as regards proportion, by one-half, or from 36 to 18 per cent, and in absolute numbers from 812 to 461." Nevertheless, this decrease has not kept pace with the decrease in the number of illiterates. Thus in 1874, out of a total of 283,768 conscripts, 18 per cent could neither read nor write; in 1894, of a total of 337,109 conscripts, only 5.34 per cent were illiterate.

On the other hand, of the conscripts in 1874, less than 1 per cent (0.69 per cent) had obtained a bachelor's degree; in 1894 the proportion was 1.89 per cent, or more than double the former proportion. During the same time the proportion of convicts who were well educated had but very slightly increased, as appears from the foregoing table showing the proportion of illiterates to total criminals. M. Levasseur has pointed out that the proportion of illiterate criminals must necessarily decline as education becomes universal.

It is, however, evident [he observes] that criminality diminishes as the term of instruction is prolonged. It may, then, be expected that as instruction is developed its moral influence will become more marked. Even now that influence is much more decided than appeared from former statistics.

The effect of public instruction in diminishing illiteracy is shown by the decreasing ratio of illiterates. The following table shows the number of illiterates in every hundred persons of the classes specified:

Year.	Conscripts.	Newly married—	
		Men.	Women.
1870 ^a .....	.....	26.8	39.4
1880 ^a	14.4	16.1	24.5
1887 ^a	10.2	10.7	17
1892 ^a	6.9	8.1	12.2
1895 ^a	5.4	6.3	9.4
1896 ^a	5.3	.....	8.8
1897 ^b	5.1	.....	.....

^a Report of M. Maurice-Faure, 1899, p. 251.

^b Report of M. Levasseur, 1896-97, pp. clxvi-vii.

The investigation of the criminal statistics of France has brought to light many other conditions bearing indirectly upon the question of public education. Two of these conditions deserve attention here. The tendency to the formation of a criminal class is indicated by the very large percentage of old offenders who reappear annually in the courts. In France in 1898 the proportion of old offenders to the number of prisoners serving sentence on the 31st of December was for men, 80 per cent; for women, 75 per cent.¹ M. Levasseur, in his work previously cited, shows that the proportion of old offenders to the total annual average number condemned in the courts rose steadily during the period 1856-1860 to 1888, viz, from 27 to 46 per cent. "Society," he says, "hides in its bosom a hideous sore; instead of healing, it perpetuates and aggravates the evil. Vice nourishes and develops vice. Moralists, jurists, and politicians are agitated by the spectacle and alarmed at the danger."²

It is further evident that the criminal impulse tends to become a fixed habit before the individual reaches mature years.

According to the statistics [says M. Fouillée], the curve of crime in France reaches its highest point between the ages of 21 and 30. It falls a little between the ages of 30 and 40, and falls rapidly between 40 and 50. Youth is then the critical age, and everything depends upon a right direction at the start. It rarely happens after the age of maturity is reached that offenders pass the bound that separates occasional crime from professional crime. On the contrary, it is during childhood and youth that this step is taken; that one adopts the criminal profession. Now it is the professional criminal that recruits the ranks of old offenders. What, then, is the principal means of putting an end to this class—that is, of accomplishing the proper object of penal law, regarded as a system essentially preventive, rather than expiatory? It is the prevention of juvenile crime.³

This necessity is fully recognized by those in charge of the State schools, and, as we have seen, they are making strenuous efforts to increase the moral influence

¹ Statistique pénitentiaire, 1894, pp. xlii, li.

² La Population française, p. 469.

³ Fouillée: La France au point de vue moral, p. 147.

of the schools and to extend the time during which young people shall be kept under instruction. But the school alone can never overcome the evil impulses inherent in man, nor can it alone combat the social influences that make for evil.

It would be out of place here to discuss these influences. We may, however, note two that are peculiar to France, and which because of their coincidence in time with the school laws have given color to the charge that the schools foster crime. In 1880 a law was passed permitting the opening of saloons without previous authorization by local authorities; the year following was passed the law establishing full liberty of the press.

Since the passage of the first-named law, according to M. Fouillée, the consumption of alcoholic liquors in France, and, moreover, of all bad liquors, has tripled, and in the consumption of intoxicants per capita of the population France has passed from the seventh to the first rank among nations. In 1887 the annual number of prosecutions for assaults upon persons had increased by one-third, and the statistics attribute this increase to the spread of alcoholism, and not to the progress of instruction.¹

With respect to the freedom of the press in France, M. Fouillée complains that it is liberty without responsibility. No attempt is made to control the circulation of immoral journals, and their sale among young people is pushed by all the devices of commercial greed.

In 1882 a cabinet minister declared before the Chamber of Deputies that there were distributed every day in Paris, at the very doors of the schools, more than 80,000 immoral papers.

In the Senate, in 1897, during the discussion of a proposal to restrict circulation through the mails, M. Berenger stated that there was not a village in France to which these journals did not penetrate. "They are distributed," he said, "by twenty and thirty thousand at a time." A journalist declared that he had no need to read the recitals in papers, as he could learn of the crimes of the day from the children in the streets. These examples, which might be multiplied, show the extent to which the liberty of the press has been abused in France.

"Our laws relating to the press," says M. Fouillée, "are in a crude and chaotic state, the interests of the press as well as its dignity require that it should stand for justice, which consists only in the maintenance of the greatest liberty for all with a responsibility equal in extent to that liberty." He cites in this connection the effect of public opinion in our own country and in England in repressing the circulation of immoral publications.

In New York [he says] and throughout the United States there are, for example, "associations for the prevention of vice," which see to it that scandalous journals do not circulate, and which, moreover, have the power to bring cases before the courts and to institute suits against offenders. * * * The National Vigilant Society, of England, works also to secure the enforcement of the very vigorous laws for the repression of vile literature. With us, also, there exist some societies of the same nature, such as the League of Public Morality. * * * But our judicial régime renders these societies powerless. Societies can do nothing in a country if the law itself is insufficient and if the Government, failing through fear of the press to enforce even the crude laws that exist, suffers the filthy stream to spread, engulfing everything.

M. Fouillée writes as a philosopher and a careful student of social conditions. It is of interest to note that in his comprehensive survey of the causes of criminality he lays special stress upon the same conditions that M. Buisson, the distinguished chief of primary education, has also emphasized.

Whatever [says M. Buisson] be the nature of the facts that are regarded as indications of a relaxation of morals, they impress everybody with their twofold character. On one side, they are phenomena that have not developed suddenly since the enactment of recent school laws but during preceding decades, phenomena

¹ Fouillée, *La France au point de vue moral*, p. 156.

whose movements statisticians have traced repeatedly since the beginning of the century. Progression in crime and vice is a social fact depending upon causes very complex; more profound, more general, than the primary school. On the other hand, these lamentable phenomena are not peculiar to France. They are found in all countries almost without exception. Quite recently the German press deplored an increase in the number of crimes and misdemeanors, notably in those imputed to youth, although religious instruction and ecclesiastical supervision were never more strictly organized.

Whatever is the case, no one, outside of that special public which reads *La Croix* or *La Gazette de France*, will be so foolish as to maintain that the school, laic or not, is the direct cause of all the disorders of society, crimes, misdemeanors, suicides, etc. If we must find some recent laws upon which to lay a part of the responsibility, it would suffice to cite two laws which have given free scope and entire impunity, the one to the manufacture and sale of alcoholic drinks, the other to the cheap pornographic press with or without illustrations.

THE SIMPLIFICATION OF FRENCH SYNTAX,¹

INCLUDING DECREE OF THE FRENCH MINISTER FOR PUBLIC INSTRUCTION,
FEBRUARY 26, 1901.

I.—INTRODUCTORY NOTE.

A few words will suffice to explain the circumstances in which the decree of February 26, 1901, relating to the simplification of French syntax, was issued by the minister for public instruction.

In January, 1900, the superior council of public instruction adopted a resolution that a committee should be appointed to consider what simplifications might be effected in French grammar for the purposes of school instruction and of examinations controlled by the ministry for public instruction. The committee was composed of MM. Gaston Paris (president), Henri Bernès, Comte, Croiset, Devinat, O. Gréard, Paul Meyer, and Henri Clairin (secretary). Their report, signed by M. Clairin, was delivered in June, 1900. In it they stated that from the way in which grammar was now being taught, elementary education was losing the simplicity which should always be its distinguishing characteristic; that pupils were perplexed and education hampered by undue insistence both by teachers and examiners on totally unimportant grammatical and orthographical rules. They therefore recommended that such rules should in future be omitted from school grammars, and that ignorance of them should not be counted as mistakes against candidates in examinations controlled by the ministry for public instruction, and they drew up a list of cases in which tolerance should be exercised. They repudiated any intention of altering the French language or injuring its best traditions, but they professed that the object of the reforms they proposed was to introduce into examinations a generous and intelligent toleration of alternative usages. It was urged that the benefits of the reform would be reaped in the first place by French children, for their work would become less wearisome and more intelligent. They would be enabled to acquire a wider and more thorough knowledge of French literature, instead of burdening their memories with useless rules, which were forgotten as soon as learned. In the second place, if French grammar were made more clear and simple, the study of the French language would be encouraged among foreigners.

A decree, accompanied by this report and the list of grammatical difficulties in which latitude was to be allowed, was issued by the minister for public instruction

¹ Republished from pamphlet issued by the special inquiries branch of the board of education, England. The circular letter and decree were translated by Mr. W. G. Lipscomb, M. A., assistant master at University College School, London, and honorable secretary of the Modern Language Association.

on July 31, 1900, but its execution was suspended pending the approval of the *Académie française*. The *Académie* at once expressed its sympathy with the principle of the reform and accepted the majority of the concessions, but made certain reservations, notably in the case of certain rules concerning the agreement of the past participle. Accordingly, a joint committee was appointed, composed of members of the *Académie française* and of the superior council of public instruction, to consider the points on which the two bodies were not in accord and any other points on which fresh proposals, acceptable to both, might be made.

On February 26, 1901, a revised decree was issued rendering compulsory the observance of the recommendations of the joint committee, which were appended as a schedule. This decree and the schedule, together with the circular of the minister of public instruction to the rectors of educational districts (*recteurs d'Académie*) are translated below.

W. G. L.

II.—CIRCULAR LETTER RELATING TO THE SIMPLIFICATION OF SYNTAX ADDRESSED BY THE MINISTER FOR PUBLIC INSTRUCTION AND FINE ARTS TO THE RECTORS OF EDUCATIONAL DISTRICTS.

PARIS, February 28, 1901.

SIR: On the 31st July last I issued a decree relating to the simplification of French syntax. I felt it my duty, however, before making its provisions obligatory to await the opinion that I had requested from the *Académie française*, for I felt that any reform in a matter of such delicacy should be supported not only by the authority of the superior council of public instruction, which determines the curricula and regulates the examinations of the different grades of education, but also of the *Académie française*, whose "prescriptive office it is to labor for the preservation and purity of the language, for the maintenance of its distinguishing characteristics and principles, and the explanation of its difficulties."

The *Académie française* has been kind enough to communicate to me the observations of the special committee appointed by its members to consider the proposed reforms to which I had directed their attention in the decree of July 31, and the schedule attached to it. I learn that the principle of the reform met with no opposition, and that although the proposals of the superior council of public instruction might not in every case be in accordance with the feeling of the *Académie française*, there was perfect agreement in a great number of cases in which grammatical difficulties can be simplified.

In these circumstances I have decided to give effect to the reforms on which the superior council of public instruction and the *Académie* are in accord. This is the object of the new decree which I issued on February 26, and of which I send you herewith a number of copies.

I think it will be useful to direct your attention particularly to the character of the reform which is hereby sanctioned. It is in fact of importance that teachers and members of examining committees who will be affected by these regulations should understand that there is no question of suppressing any fundamental rules of our syntax. The reform simply aims at rendering elementary instruction in French syntax simpler and easier for children and foreigners, and freeing it from useless complexities.

As early as 1891 one of my honorable predecessors protested against the abuse of grammatical tests and deplored the time spent even in primary schools on the study of rules often disputed by the most famous writers of dictionaries, and affecting neither the character nor the essential principles of the language. I may mention in this connection the use which is still made in some schools of dictations which are, as a rule, nothing but a succession of meaningless sentences in which oddities and catches in spelling are piled up at will. These exercises are of no use, and you

will be good enough to request teachers to discontinue them. Dictations should not be artificially manufactured. They should be taken from our best authors, in order that the pupils may have at the same time a lesson in grammar and in literary taste.

The committee of the superior council has alluded to subtle and sometimes false rules which hamper elementary education and serve no purpose either in reading or in the cultivation of intelligence and the development of thought. They have drawn up a sort of catalogue indicating the licenses that may properly be allowed. This list, supported by the approbation of the *Académie française*, is appended as a schedule to the present decree.

Henceforth the members of examining committees will no longer have to act upon merely general instructions; they will be in possession of a definite guide which will relieve them of all doubt and render their task easier. On the other hand, masters will know exactly what to retain and what to discard in the books that are used in the lower and middle forms of schools.

The reform in syntax that we are carrying out does not in the least imply that less time and care is to be devoted to the study of French—quite the contrary. The genius of a language, its flexibility, elegance, and clearness do not lie in peculiarities of spelling. They are learned by studying the words of the great orators and writers. The time gained by the simplification of the grammar will be usefully employed in the study and explanation of selected books and in French essay writing—the only kind of work which is capable of teaching the resources and manipulation of the language.

I request you, sir, to take the necessary steps to have the accompanying decree put in force. You will be good enough to bring it to the notice of the district inspectors under your direction, the heads of secondary schools and the presidents of the various examining committees, and to see that it is published in the primary education gazettes.

I remain, sir, etc.,

The Minister of Public Instruction and Fine Arts.,

GEORGES LEYGUES.

III.—TRANSLATION OF THE DECREE AND OF THE SCHEDULE.

1. By virtue of article 5 of the law of the 27th February, 1880. 2. *In re* the decree of the 31st July, 1900. The minister of public instruction and fine arts, after consultation with the superior council of public instruction, decrees:

1. In all competitive or other examinations controlled by the ministry for public instruction involving special tests in orthography, the use by candidates of the concessions notified in the present decree shall not be reckoned as mistakes.

The same provision applies to the marking of the various French compositions in the competitive or other examinations controlled by the ministry for public instruction which do not involve special orthographical tests.

2. The decree of the 31st July, 1900, is revoked.

Given in Paris, the 26th February, 1901.

GEORGES LEYGUES.

Schedule to the decree of February 26, 1901.

SUBSTANTIVES.

Plural or singular.—In all constructions where the sense permits the noun complement to be understood either in the singular or the plural the use of either number will be allowed; *e. g.*, *des habits de femme* or *de femmes*; *des confitures de groseille* or *groseilles*; *des préteurs en bonnet carré* or *en bonnets carrés*; *ils ont ôté leur chapeau* or *leurs chapeaux*.

SUBSTANTIVES OF TWO GENDERS.

1. *Aigle*.—According to present usage this noun is masculine, except when it means standards; *e. g.*, *les aigles romaines*.

2. *Amour, Orge*.—Present usage makes these two words masculine in the singular. In the plural the masculine or feminine will be allowed without distinction; *e. g.*, *les grandes orgues, un des plus beaux orgues; de folles amours, des amours tardifs*.

3. *Délice and Délices* are, in reality, two different words. The former is rare and rather affected. It is of no use to pay any attention to it in elementary education and school exercises.

4. *Automne, Enfant*.—These two words being of both genders, it is useless to pay any special attention to them. The same applies to all substantives which are without distinction, either masculine or feminine.

5. *Gens, Orge*.—In all cases the adjective qualifying *gens* may be made feminine; *e. g.*, *Instruits or instruites par l'expérience les vieilles gens sont soupçonneux or soupçonneuses*.

Orge may be feminine in all cases; *e. g.*, *orge carrée, orge mondée, orge perlée*.

6. *Hymne*.—There is no sufficient reason for giving this word two different meanings, according to whether it is used masculine or feminine. Either gender will be admitted, whether it means national anthems or religious hymns; *e. g.*, *un bel hymne or une belle hymne*.

7. *Pâques*.—This word may be feminine whether it denotes a date or a religious festival; *e. g.*, *A Pâques prochain, or à Pâques prochaines*.

PLURAL OF SUBSTANTIVES.

Plural of proper names.—Since there is the greatest obscurity in the rules and exceptions taught in the grammars, proper names preceded by the plural article may in all cases take the sign of the plural; *e. g.*, *Les Corneilles* and *les Gracques; des Virgiles* (copies) and *des Virgiles* (editions). And so with the names of persons denoting their works; *e. g.*, *des Meissoniers*.

Plural of nouns borrowed from other languages.—When these words have thoroughly become part of the French language the plural may be formed according to the general rule; *e. g.*, *des extéats; des déficits*.

COMPOUND NOUNS.

Compound nouns.—The same compound nouns are nowadays met with sometimes with and sometimes without a hyphen. It is useless to weary children by teaching unjustifiable inconsistencies. The absence of a hyphen in the expression *pomme de terre* does not prevent it from being a real compound word just as much as *chef-d'œuvre*, for example. These words may always be written without the hyphen.

THE ARTICLE.

Article before proper names of persons.—It is the custom to use the article before certain Italian family names; *e. g.*, *Le Tasse, le Corrège*, and sometimes incorrectly before Christian names (*le*) *Dante, (le) Guide*. Ignorance of this usage will not be counted as a mistake.

Great uncertainty exists also as to the way in which the article which forms part of certain French names should be written: *la Fontaine, la Fayette* or *Lafayette*. When such names occur in dictations, it is best to say whether the article ought to be separated from the noun.

Omission of the article.—When two adjectives joined by *et* relate to the same substantive in such a way as to denote in reality two different things, the article

may be omitted before the second adjective; *e. g.*, *L'histoire ancienne et moderne* or *l'histoire ancienne et la moderne*.

Partitive article.—*Du, de la, des*, instead of the partitive *de*, will be allowed before a substantive preceded by an adjective; *e. g.*, *de or du bon pain, de bonne viande or de la bonne viande, de or des bons fruits*.

Article before plus, moins, etc.—The rule which exacts that *le plus, le moins, le mieux* shall be invariable before an adjective denoting the highest degree of the quality in the substantive which it qualifies, without comparison with other things, is very subtle and of little practical use. It is unnecessary to pay any attention to it in elementary education or in school exercises. *Le plus, la plus, les plus, les moins, les mieux* may all be used in such constructions as *on a abattu les arbres le plus or les plus exposés à la tempête*.

ADJECTIVES.

Agreement of the adjective.—In the expression *se faire fort* of the adjective may be made to agree; *e. g.*, *se faire fort, forte, forts, fortes de*. . . .

Adjective qualifying several substantives.—When a qualifying adjective follows several substantives of different gender, the adjective may always be put in the masculine plural, whatever the gender of the nearest substantive; *e. g.*, *appartements et chambres meublés*.

Nu, demi, feu.—These adjectives may agree with the substantive which they precede; *e. g.*, *nu or nus pieds; une demi or demie heure* (without a hyphen between the words); *feu or feue la reine*.

Compound adjectives.—The two component words may be united into one word, which shall form its feminine and plural according to the general rule; *e. g.*, *nouveauné, nouveaunée, nouveaunés, nouveaunées; courtrévu, courtrévüe, courtrévut, courtrévües*, etc. But compound adjectives which denote shades of color having become, by an ellipsis, really invariable substantives, will be treated as invariable words; *e. g.*, *des robes bleu clair, vert d'eau*, etc., just like *des habits marron*.

Invariable past participles.—At present the participles *approuvé, attendu, ci-inclus, ci-joint, excepté, non compris, y compris, ôté, passé, supposé, vu*, when placed before the substantive to which they are joined, are invariable. And indeed *excepté* is already classed among the prepositions. The agreement of these participles will be made optional, and the application of different rules—according to whether they are placed at the beginning or in the middle of the clause, and whether they define the substantive or not—will not be insisted upon; *e. g.*, *ci joint or ci jointes les pièces demandées* (without hyphen between *ci* and the participle); *je vous envoie ci joint or ci jointe copie de la pièce*.

The same freedom will be allowed in the case of the adjective *franc*; *e. g.*, *envoyer franc de port or franche de port une lettre*.

Avoir l'air.—*Elle a l'air doux or douce, spirituel or spirituelle* may be written indifferently. No knowledge will be demanded of any subtle difference of meaning arising from the agreement of the adjective with the word *air* or with the person described.

Numeral adjectives. Vingt, cent.—The existing rule by which these two words are put in the plural when they are multiplied by another number is justified in certain cases by the pronunciation. The plural of *vingt* and *cent* will be allowed even when these words are followed by another numeral adjective; *e. g.*, *quatre vingt or quatre vingts dix hommes; quatre cent or quatre cents trente hommes*.

The hyphen between the word denoting the units and that denoting the tens will not be insisted on; *e. g.*, *dix sept*.

In dates of the Christian era *mille* will be accepted instead of *mil*, as in ordinary numbers; *e. g.*, *L'an mil huit cent quatre vingt dix or l'an mille huit cents quatre vingts dix*.

DEMONSTRATIVE AND INDEFINITE ADJECTIVES AND PRONOUNS.

Ce.—The particles *ci* and *là* may be added to the preceding pronoun without making any distinction between *qu'est ceci*, *qu'est cela*, and *qu'est ce ci*, *qu'est ce là*. In these expressions the hyphen may be omitted.

Même.—*Même* following a plural substantive or a pronoun may be made to agree, and no hyphen between *même* and the pronoun is necessary; e. g., *nous mêmes*, *les dieux mêmes*.

Tout.—*Tout* may be made to agree with the name of a town which it precedes, and no attempt will be made to establish a somewhat subtle distinction between such constructions as *toute Rome* and *tout Rome*.

It will not be counted as a mistake to write without any difference of meaning, when it is a woman who is speaking, *je suis tout à vous* or *je suis toute à vous*. When *tout* is used with the indefinite sense of *chaque* it may, with its accompanying substantive, be written either singular or plural without altering the meaning; e. g., *des marchandises de toute sorte* or *de toutes sortes*; *la sottise est de tout (tous) temps et de tout (tous) pays*.

Aucun.—This word may be used with a negative either singular or plural; e. g., *ne faire aucun projet* or *aucuns projets*.

Chacun.—When this pronoun follows the verb and refers to a plural subject or object either of the possessive adjectives, viz, *son*, *sa*, *ses*, or *leur*, *leurs*, shall be allowed after *chacun*; e. g., *Ils sont sortis chacun de son côté* or *de leur côté*; *remettre des livres chacun à sa place* or *à leur place*.

VERBS.

Compound verbs.—The omission of the apostrophe and of the hyphen will be allowed in compound verbs; e. g., *entrouvrir*, *entrecroiser*.

Hyphen.—The omission of the hyphen between the verb and the pronoun-subject following the verb will be allowed; e. g., *est il*.

Distinction between the apparent subject and the real subject; e. g., *sa maladie sont des vapeurs*.—There is no occasion to teach rules for such constructions as this, for their study can only be profitable when they occur in the text which is being read and explained. It is not a question of grammar but of style, and should find no place in elementary school work or in examinations.

Concord of the verb preceded by several subjects not joined by the conjunction et.—If the subjects are not summed up in an indefinite word such as *tout*, *rien*, *chacun*, the verb may always be put in the plural; e. g., *sa bonté, sa douceur le font admirer*.

Concord of the verb preceded by several subjects in the singular joined by ni, comme, ainsi que, and other similar expressions.—The verb will always be allowed in the plural; e. g., *Ni la douceur ni la force n'y peuvent rien* or *n'y peut rien*; *La santé comme la fortune demandent à être ménagées* or *demande à être ménagée*. *Le général avec quelques officiers sont sortis* or *est sorti du camp*; *Le chat ainsi que le tigre sont des carnivores* or *est un carnivore*.

Concord of the verb when the subject is a collective noun.—Whenever the collective is accompanied by a plural complement the verb may agree with the complement; e. g., *Un peu de connaissances suffit* or *suffisent*.

Concord of the verb when the subject is plus d'un.—Since the existing practice is to make the verb singular to agree with its subject *plus d'un*, it will be permissible to do so even when *plus d'un* is followed by a plural complement; e. g., *Plus d'un de ces hommes était* or *étaient à plaindre*.

Concord of the verb preceded by un de ceux (une de celles) qui.—When should the verb in the relative clause be plural and when singular? This is a nicety of language, and no attempt will be made to introduce it into school work or examinations.

* *C'est, ce sont*.—As great diversity of custom exists as to the exact use of *c'est* and *ce sont*, and as the best authors have used *c'est* to introduce a plural subject or a pronoun in the third person plural, the use of *c'est* instead of *ce sont* shall always be permitted; e. g., *c'est or ce sont des montagnes et des précipices*.

Sequence of tenses.—The present subjunctive will be allowed instead of the imperfect in subordinate clauses dependent upon clauses in which the verb is in the conditional present; e. g., *Il faudrait qu'il vienne or qu'il vint*.

PARTICIPLES.

Present participle and verbal adjective.—The general rule should be observed, by which the participle is distinguished from the adjective, in that the former denotes *action* and the latter *state*. It is sufficient for pupils and candidates to give evidence of common sense in doubtful cases. Subtleties must be carefully avoided in setting exercises; e. g., *Des sauvages vivent errant or errants dans les bois*.

Past participle.—No change is to be made in the rule by which the past participle must agree with the word it qualifies when it is used as an epithet, and with the subject when it is a complement to the verb *être* or when it is an intransitive verb conjugated with *être*; e. g., *Des fruits gâtés; ils sont tombés; elles sont tombées*.

As for the past participle with the auxiliary verb *avoir*, when it is followed either by an infinitive or by a present participle or another past participle, it may remain invariable, whatever the gender and number of the objects which precede: e. g., *Les fruits que je me suis laissé or laissés prendre; les sauvages que l'on a trouvé or trouvés errant dans les bois*. When the past participle is preceded by a collective noun it may be made at choice to agree with the collective or the noun dependent on it; e. g., *La foule d'hommes que j'ai vue or vus*.

ADVERBS.

Ne in subordinate clauses.—The use of this negative in a great number of subordinate clauses gives rise to complicated, difficult, and incorrect rules, often at variance with the usage of the most classical writers.

Regardless of whether the clauses on which they depend are affirmative, negative, or interrogative, the omission of *ne* will be permitted in subordinate clauses dependent on such verbs or phrases as: *Empêcher, défendre, éviter que, &c.*; e. g., *Défendre qu'on vienne or qu'on ne vienne; Craindre, désespérer, avoir peur, de peur que, &c.*; e. g., *De peur qu'il aille or qu'il n'aille. Douter, contester, nier que, &c.*; e. g., *Je ne doute pas que la chose soit vraie or ne soit vraie. Il tient à peu, il ne tient pas à, il s'en faut que, &c.*; e. g., *Il ne tient pas à moi que cela se fasse or ne se fasse*.

In like manner the omission of *ne* after comparatives or words implying comparison will be permitted: *Autre, autrement que, &c.*; e. g., *L'année a été meilleure qu'on l'espérait or qu'on ne l'espérait; les résultats sont autres qu'on le croyait or qu'on ne le croyait*.

Likewise after the phrases *à moins que, avant que*; e. g., *à moins qu'on accorde le pardon or qu'on n'accorde le pardon*.

NOTE.

In examinations, mistakes which prove no want of intelligence or real knowledge on the part of candidates, but only show ignorance of some nice point or grammatical subtlety, must not be counted as serious.

Approved as a schedule to the decree of February 26th, 1901.

The minister for public instruction and fine arts.

GEORGES LEYGUES.

CHAPTER XXV.

HIGHER COMMERCIAL EDUCATION.¹

The movement for the institution of courses of study for the purpose of affording an opportunity for the higher education of young men who desire to enter upon business careers or branches of the public service, like the consular, is making considerable progress. For more than fifty years commercial or business colleges have flourished in this country and have furnished instruction to large numbers of students. The subjects of study included in the courses of these institutions were arithmetic, bookkeeping, accounting, stenography, typewriting, English, penmanship, business forms, correspondence, etc., designed to prepare young men and women for clerical positions, such as bookkeepers, stenographers, typewriters, etc., but did not include a study of the sciences related to commercial and industrial pursuits. The work of the commercial or business colleges is thus described by Dr. Edmund J. James:

As to the so-called commercial or business colleges, I would not willingly do them an injustice. I believe that they are a great and permanent constituent of our educational system. They have done and are doing and are destined to continue doing a great and useful work. But the training which they, with few exceptions, furnish can scarcely be called a higher training at all. It has to do with facilities—indeed, chiefly with manual facilities—writing, reckoning, etc., those things that go to make up a good clerk, things of great value in themselves, things which every business man would be the better for having, and yet things which after all are only facilities; they do not touch the essence of successful business management or tend to develop the higher sides of business activity; they bear little or no relation to those broader views characteristic of the business manager as distinct from the business clerk and are of course next to useless as a means of liberal education. The knowledge which they impart, however valuable in itself, does not suffice to fit a young man for the struggle of commercial life, for wise management of a private estate or for efficient public service.²

The Wharton School of Finance and Economy of the University of Pennsylvania is generally conceded as having been the first institution that offered special courses of study for the higher education of business men. It was established on an endowment of \$100,000, given to the University of Pennsylvania in 1881 by Mr. Joseph Wharton, of Philadelphia, Pa. In 1889 Mr. Wharton gave an additional sum of \$25,000 to establish a library fund for the school.

The considerations that determined Mr. Wharton to establish the school are thus stated by Dr. James, formerly a professor in the school:

First, the belief that the business classes of our country need a higher training as much or more than any other classes; second, the view that the commercial or

¹ Other articles upon this subject in previous Reports of this office are: Report on commercial education in Europe to the American Bankers' Association (James), Report 1895-96, Vol. 1, 721-837; Commercial education in Europe, Rep. 1896-97, Vol. 1, 207-231; Commercial education (Eliot), Rep. 1898-99, Vol. 1, 677-681; Report of committee of National Educational Association on courses of study for business colleges, Id., Vol. 2, 2163-2174; The German commercial clerk, Rep. 1899-1900, Vol. 1, 835-846; Industrial and commercial schools in Hungary, 865-878; Commercial education in Scotland, Id., Vol. 2, 1431-1436; in Saxony, 1439-1441; the commercial courses of a number of higher institutions of learning, 1861-1871.

² Education of Business Men, I and II, American Bankers' Association, 1892.

business college, however valuable its curriculum, is by its very nature unable to give this higher training; third, the fact that the American college, however real and valuable its higher training, does not in its present form furnish a kind of higher training which appeals to the business sentiment of the community, as is shown by the fact of the small number of youths looking to business careers who enter college.

The object of the Wharton School, as stated by Mr. Wharton in the "project" submitted to the trustees of the University of Pennsylvania, is "to provide for young men special means of training and of correct instruction in the knowledge and in the arts of modern finance and economy, both public and private, in order that, being well informed and free from delusions upon these important subjects, they may either serve the community skillfully as well as faithfully in offices of trust, or, remaining in private life, may prudently manage their own affairs and aid in maintaining sound financial morality; in short, to establish means for imparting a liberal education in all matters concerning finance and economy."

While the instruction to be given in the school was not strictly defined nor limited by Mr. Wharton, he suggested in the "project" that the school should be conducted by one principal or dean, one professor or instructor of accounting or book-keeping, one professor or instructor upon money and currency, one professor or instructor upon industry, commerce, and transportation, and one professor or instructor upon elementary and mercantile law.¹

The Wharton School was opened for instruction in the fall of 1881, but in its first years did not attract any large numbers of students. The number in 1881-82 was 13; in 1890-91, 59; and in 1900-1901 the number had increased to 139.

In 1889 education for business began to receive the attention of the American Bankers' Association. On October 16 of that year the following resolution was unanimously adopted by the executive council of that association:

Resolved, That a committee of not less than three or more than five be appointed by the chairman, to whom shall be submitted the subject of the preparation or procurement of a paper to be read at the next convention of the association upon the establishment of schools in connection with the universities and colleges of the country, of general scope and character like that of the Wharton School of Finance and Economy, connected with the University of Pennsylvania, and the best means by which the establishment and endowment of such schools may be promoted and fostered by the association.

The committee appointed under the above resolution secured Prof. Edmund J. James, Ph. D., of the Wharton School to prepare and read a paper on schools of finance and economy, which he did at the convention held at Saratoga on September 3, 1890. In his address Dr. James emphasized the need of schools for the education of business men, and gave a somewhat detailed account of the work and aims of the Wharton School. Recognizing the limitations of that institution as then organized, Dr. James gave some idea as to what, in his opinion, a school of finance and economy should include. He said:

The ideal of the faculty, it may be said, is a great institution, comprising many different courses—one looking to business, another to journalism, still another to politics, another to the university—all composed alike of two elements—a common one, consisting of such studies as political economy, constitutional law, politics, history, etc., and a professional one, embracing such special instruction as may be of aid to preparing the students for their particular careers. The business course itself should be subdivided according to the intention of the student, and should comprise not merely the fundamental branches we now have, but many others, such as railroading, commerce, insurance, etc.

An institution like this, with a curriculum based upon a thorough knowledge of our own vernacular, its use, literature, history, etc., with such other languages, ancient or modern, as the student might choose to take, and all based on a thorough elementary training in languages, mathematics, and natural science, would be an addition to our educational system comparable in importance and influence

¹ For the course of study and detailed description of instruction now offered by the Wharton School, see p. 1173.

only to the great system of technical schools which in a different field are revolutionizing our American education. It would give us also the best system of training for business, journalism, teaching—in a word, for citizenship—which the world has yet seen.

On September 5, 1890, the following resolution was adopted by the American Bankers' Association:

Resolved, That the American Bankers' Association most earnestly commends, not only to the bankers, but to all intelligent and progressive citizens throughout the country, the founding of schools of finance and economy for the business training of youth, to be established in connection with the universities and colleges of the land, upon a general plan like that of the Wharton School of Finance and Economy of the University of Pennsylvania, so ably set forth by Professor James in his most admirable address before this convention.

Resolved, That the executive council is hereby directed to carefully consider and, if possible, devise some feasible plan whereby this association may encourage or promote the organization of a school or schools of finance and economy among our institutions of learning, and report upon the same at the next convention.

The address of Dr. James and the action of the association on the subject of schools of finance and economy were printed by the association and distributed among bankers, educators, and universities and colleges throughout the country, and awakened great interest in the subject. In 1892 Dr. James was commissioned by the association to make an examination into European institutions for the education of business men, and his report on the subject was published by the American Bankers' Association and was reprinted in full in the Report of the Commissioner of Education for 1895-96, pages 721-837. This report gives an historical survey, as well as the courses of study offered in the commercial schools of Europe, particularly in Austria, France, and Germany, and was received by business men and educators as a valuable contribution in aid of commercial education.

As a result of the agitation of this subject, schools, colleges, or courses of study of various designations, but all designed for the education of persons desiring to enter upon business careers, the public service, or other callings in which a knowledge of business is essential, have been established in a number of the universities and colleges of the country. The majority of such courses extend through a period of four years and lead to the baccalaureate degree. The Amos Tuck School of Dartmouth College is essentially a graduate school and is intended primarily for persons who have already taken a baccalaureate degree.

While special courses in commerce and finance are announced by a comparatively small number of the universities and colleges of the country, instruction in many of the branches of study included in such courses has been for some time and is now offered in the departments of economics or political economy of a considerable number of the leading institutions. Thus we find included in such departments courses on money, banking, transportation, corporations, trusts, commercial geography, commercial history, economic organization, trade statistics, accounting, speculative market, etc. New courses are being added constantly to these departments, and under the elective system in vogue in our institutions students are enabled to select the subjects offered that are suited to their future careers.

In the following pages are given the courses of study in commerce, finance, and administration maintained by a number of the institutions of the country, with detailed statements concerning the instruction offered in the commercial branches so far as given in the annual catalogues of the institutions.

UNIVERSITY OF CALIFORNIA, BERKELEY, CAL.

The college of commerce was opened for instruction in the fall of 1898, and "the curriculum is intended to afford an opportunity for the scientific study of commerce in all its relations and for the higher education of business men and of the higher officers of the civil service." The undergraduate course of four years

leads to the degree of Bachelor of Science, and "is devoted almost wholly to those studies of an elementary or a technical nature which are deemed most appropriate as a broad preparation for commercial life. The small number of electives are to consist of such special studies as shall most directly aid the student in his preparation for the career that he intends to follow after graduation." Opportunity for further specialization is offered in the graduate department.

One hundred and twenty-five units are required for graduation, and are grouped as follows:

(1) *Elementary studies*.—English, 6 units; modern languages, 18 units; mathematics, 8 units; history (mediæval and modern), 12 units; economics (theoretical), 6 units; geography (including 7 units in the study of the materials of commerce with the assistance of the Pacific Commercial Museum), 15 units; military science, 5 units.

(2) *Technical studies*: (a) *In practical economics*.—History and theory of international commerce, 6 units; money, banking, and credit, 3 units; manufacturing processes, 3 units; public finance, 3 units; statistics, 3 units; accounting, 3 units; transportation, 3 units; commercial practice, 2 units; social policy, 3 units. (b) *Jurisprudence*.—Elementary law, 3 units; international law, 3 units; industrial and commercial law, 6 units.

(3) *Electives*.—To be devoted to a special field, 14 units.

In a report to the board of regents made by President Benjamin Ide Wheeler in December, 1900, he says:

The work of the College of Commerce, as outlined in the curriculum adopted by the faculty, does not include a sufficient amount of work characteristic of commercial activities. The faculty has intended a thorough revision of its curriculum, but until the funds of the university or the special equipment of this school make it possible to add a number of chairs for the teaching of practical commercial subjects, it is feared that the college will not fulfill its highest opportunity.

The work in geography, conducted by Professor Davidson, has given very particular attention to the subjects of currents and climatology of the Pacific. It is necessary that this work be very much enlarged by a study of the products and climates of the other regions involved in the trade connections of this country. It is highly important that there should be offered to students in the College of Commerce instruction in the Russian language, and to a fuller extent than our possibilities now allow, in the Spanish language. Provision has already been made for instruction in Chinese and Japanese. Added instruction is needed in banking, insurance, statistics, and in various fields of practical business procedure. The founding of the Pacific Commercial Museum promises to provide for this school an invaluable laboratory.

COLORADO AGRICULTURAL COLLEGE, BOULDER, COLO.

The commercial course was established in 1896, extends through two years, and is as follows:

Junior year.—Commercial arithmetic, geometry, general history, spelling, book-keeping, penmanship, rhetoric and composition, accounting, business correspondence, business practice and banking.

Senior year.—Constitution of the United States, stenography, typewriting, literature, business geography, business law, physiological psychology, sociology, political economy, and office practice.

UNIVERSITY OF CHICAGO, CHICAGO, ILL.

The College of Commerce and Administration was inaugurated in 1898 "in response to the growing demand for a course of university instruction that should be adapted to the needs of students who desire to make university work more directly introductory to careers in business, law, diplomacy, administration, journalism, etc." The course of study extends through four years, and leads to the degree of Bachelor of Philosophy. It is partly prescribed and partly elective.

In the junior college (freshman and sophomore years) the work includes 18 majors,¹ besides a specified amount of public speaking and physical culture. In the senior college (junior and senior years) the work includes 18 majors, besides physical culture for four quarters.

The prescribed work of the junior college is as follows:

Economic and social history.—The development of the economic organization of society down to the time of the so-called industrial revolution in the latter part of the eighteenth century.

Commercial geography.—A study of the various countries and their chief products; the effect of soil, climate, and geographical situation in determining the character of national industries and of international trade, commercial routes, seaports; the location of commercial and industrial centers; exports and imports; the character, importance, and chief sources of the principal articles of foreign trade.

Civil government in the United States.—This course includes an analysis of the structure and working of government in the United States—local, State, and national.

History.—(1) The mediæval period; (2) the modern period; (3) the United States. *An introduction to the study of society.*—A descriptive account of the organization and processes of modern society.

Modern languages.—The three required courses in modern languages may be selected with the advice of the dean from any of the junior college courses offered in those departments.

English.—In English two courses in English composition and rhetoric will be followed by one affording an introduction to English literature.

Mathematics.—Plane trigonometry and college algebra are required.

Science.—The two required courses in science may be elected, with the advice of the dean, from any of the junior college courses in physics, chemistry, the biological group, or geology.

The work of the senior college consists of 18 majors; of these 7 are prescribed and 11 are elective. The prescribed courses are: Principles of political economy, 2 majors; elements of jurisprudence, 1 major; Federal constitutional law, 1 major; history of Europe in the nineteenth century, 1 major; recent American history, 1 major; psychology, 1 major.

The prescribed work of the senior college is as follows:

Principles of political economy.—Exposition of the laws of modern political economy.

The course is designed to give the students an acquaintance with the working principles of modern political economy.

Elements of jurisprudence.—A study of fundamental legal ideas and principles, illustrated by cases and statutes.

Federal constitutional law of the United States.—An elementary course based on a selected text-book.

Europe in the nineteenth century.

Recent American history (1861-1900).

Psychology.

The remaining 11 majors of the senior college will be selected, with the advice of the dean, from among the following groups of courses. In special circumstances technical scientific work may be more beneficial than the courses listed here. These or other courses outside the following list may be taken only with the consent of the dean.

ECONOMICS, COMMERCE, AND FINANCE.

Economic theory.—Value. The aim is to trace the development of the theory of value down to the writings of the present day, and to take up other controverted topics of economic theory.

Unsettled problems of economic theory.—Questions of exchange and distribution. Critical examination of selections from leading writers.

History of political economy.—This course on the development of economic doctrine treats both of the history of topics and that of schools and leading writers; the mercantile system, the physiocratic school, the English writers from Adam Smith to J. S. Mill, and recent American and European economists.

Scope and method of political economy.—The province, postulates, and character of political economy, its method, the nature of economic truth, methods of proof,

¹ A major is a subject pursued daily for one quarter (twelve weeks).

and the relation of political economy to ethics, political science, and sociology are discussed.

Training course in statistics.—The object of this course is to train students in the practical use of the statistical method of investigation. Stress will be laid upon methods of collecting, tabulating, and interpreting statistics of different orders, and constructive work will be required in order to obtain practical efficiency in the treatment of such data.

Economic factors in civilization.—Study is given of the origin of some phases of present forms of industry, and the effect of economic motives and exigencies on cultural development.

Problems of American agriculture.—Special attention will be given to the extension and changes of the cultivated area of the United States; the methods of farming; the influence of railways and population, and of cheapened transportation; movements of prices of agricultural products; European markets; competition of other countries; intensive farming; diminishing returns; farm mortgages; and the comparison of American with European systems of culture.

Industrial development of the United States.—A study is made of the distribution of population among the important industries at different periods of our development, and a comparison is made of the wages and profits secured by the different groups. The effects of changing from extractive industries to manufactures are traced. The influence of legislation in shaping the industrial development of the nation is sought. The forces which determine the location and prosperity of industries are studied, and the effect upon our exports and imports of changes in our industries is dwelt upon.

Recent industrial development in Europe.—The competition of industries in Great Britain, Germany, and other countries with our own producers; the elements lying behind the industrial growth of Germany; the changed relation of different countries in the scale of industrial importance during recent decades; the influence of tariffs on European development; and the existing tariff systems in the principal countries of Europe.

Modern industries.—This elementary course, requiring no previous study of economics, gives an exposition of the present organization of productive industries; the processes of leading industries, such as iron and steel, cotton, wool, etc.; the effects of modern invention; internal business methods, etc. Visits will be made to a number of large industrial establishments.

Economics of workingmen.—The purpose is to treat of efforts made to improve the condition of workingmen, and the effects of cooperation, profit sharing, building associations, manual training, trades unions, and the like.

The group of industrials.—The labor movement from the point of view of sociology. The influence of habitat, race, inheritance, migration, division of labor, towns, institutions, and conventions on the differentiation and opportunities of the so-called operative class, the actual condition of this group, and their participation in the goods of civilization; the essentials of a truly human existence; the modes by which improved ideas of welfare originated and are diffused; the social system of economic, political, and cultural organization through which the group must enjoy the social inheritance; description, criticism, programme of amelioration.

Socialism.—This course treats historically and critically socialistic theories, recent socialistic developments; the writings of Marx, Rodbertus, and Lassalle; and gives a review of recent popular writers, platforms, and programmes of socialistic organizations.

Technique of trade and commerce.—A study of the actual forms of modern business; market quotations; investment securities; operations on the stock and produce exchange; foreign and domestic exchange; insurance; the construction and use of exchange, bond, and annuity tables.

Commercial treaties.—A study is made of the text of the most important commercial treaties, supplemented by an examination into their economic causes and effects. This course is suitable for students who have already given considerable attention to history and political science.

Colonial economies.—This course will discuss the trade and financial relations of modern colonies to the mother country; their gains or losses; the economic development of colonies to the present time; their productions, their monetary systems, their labor conditions, and the influence of racial characteristics on their industrial growth.

The history of commerce during the middle ages.

Trusts.—Main emphasis at present will be put upon industrial combinations or trusts as a type of industrial organization, while outlining also the general province of government in regard to industry.

American shipping.

Railway transportation.—The course opens with a brief historical survey of the development of the transportation system of the United States; then takes up a discussion of theories of rates, competition, combination, speculation, discrimination, legislation, and the position of the State, the public, the investors, the managers, and the employees.

Comparative railway legislation.—This course studies the development and present status of the railway systems of Great Britain, France, Germany, Austria-Hungary, Russia, Italy, Brazil, and Australia. A comparative study will show what light the experience of other countries throws on our own railway problems.

Accounting.—A study of the underlying principles. Some practice work under the guidance of an expert auditor of accounts will be given, but only with a view to illustrating the principles discussed in the lectures. Emphasis will be placed on the interpretation of balance sheets and the problems implied therein.

Money.—An examination is made first of the principles of money, whether metallic or paper; next the subjects of metallic and paper money are taken up, and attention is given to the experiences of the United States and modern countries.

Banking.—A study is made of the banking systems of leading nations; the relations of the banks to the public; their influence on speculation; and the relative advantages of national banks, State banks, trust companies, and savings banks.

Financial history of the United States.—After a rapid survey has been made of the financial experiences of the colonies and the confederation, a detailed study is undertaken of fiscal administration and the course of legislation upon currency, debts, and banking in the United States. The study will be based upon first-hand examination of the sources.

Finance.—In these courses it is intended to make a comprehensive survey of the whole field of public finance. The treatment is both theoretical and practical, and the method of presentation historical as well as systematic. Most emphasis is placed upon the study of taxation, although public expenditures, public debts, and financial administration are carefully studied.

LAW AND GOVERNMENT.

History of political theory.—American theory. The development of political theory since the French revolution. First term devoted to the European movement; second term to American political ideas. Lectures, reports, and discussions.

Comparative national government.—A comparative study of the constitutions and constitutional law of leading nations, as France, Germany, Switzerland, Great Britain, and the United States. The texts of constitutions are read in the light of commentaries, like those of Burgess, Laband, Dicey, Lebon, and others, with lectures by the professor.

Federal government.—The principal federations of history are studied—the United States of America, Germany, and Switzerland receiving special attention.

The government of Great Britain.—A somewhat detailed study, historical and descriptive, of the British system.

The government of France.—A somewhat detailed study of the French system, as it has developed since the revolution.

The government of Germany.—A study of the German Empire.

The government of colonies.—A study of the political development of the colonial system in recent times.

Federal constitutional law of the United States.—This course will examine the leading principles established by the decisions of the Supreme Court of the United States. Selected cases are studied in detail.

State constitutional law: I. Principles of organization.—Making and amendment of constitutions; suffrage and elections; the separation of powers; legislative and administrative organization; local self-government.

State constitutional law: II. Principles of legislation.—Constitutional limitations regarding process and substance of legislation, with special reference to the police power.

Comparative politics; State governments in the United States.—A study in the constitutions and constitutional history of the American Commonwealths.

The law of municipal corporations.—Organization and power of municipal corporations. Corporate rights and liabilities.

Municipal government.—A comparative study of the modern municipality, American and European, in its legal, constitutional, and administrative aspects.

The elements of international law.

Diplomatic history of Europe.—The principal European treaties of the last century are examined, with an especial view to ascertain the main principles of existing international agreements.

Diplomatic history of the United States.—The treaty relations of the United States with foreign powers are studied in detail, including an analysis of documents and an examination of methods.

Roman general administration.—A historical view with constant reference to the sources, of the methods of election, powers, limitations, privileges, insignia, etc., of the various Roman magistrates, and to the organization, functions, and order of business of the senate and the *comitia*. The work of the class room will consist of lectures and the discussion of papers prepared by the members of the class.

Institutes of Roman law.—A brief outline of the history of the Roman law. Study of the text of Justinian's Institutes.

History and elements of the law of property.—Principally the development of the law of real property. Instruction will be based on the second book of Blackstone's Commentaries.

The law of persons.—Status; legal and acting capacity; absolute personal rights; domestic relations.

HISTORY.

American history.—(1) The early period under the Constitution (1789-1820). (2) The middle period (1829-1860).

The history of American political parties.—Their organization and action to 1840.

The age of the renaissance, 1250 A. D. to 1500 A. D.

The history of Europe in the seventeenth and eighteenth centuries.

The French revolution and the era of Napoleon.

The rise of Prussia.

SOCIOLOGY.

Contemporary society in the United States.—A concrete study of natural conditions, the population and its distribution, institutions, economics, political, educational, and ecclesiastical, together with an examination of conventional ideas as to national characteristics.

American cities.—A study of the location, growth, population, groupings, arrangements, architecture, and typical institutions of American cities.

Development and organization of the press.—A brief historical survey, followed by a study of the technical side of a modern newspaper, its organization as a business unit, its relation to organized news collecting, to news and other syndicates, to advertising, to distributing agencies.

The family.—The development of the domestic institutions in lower and higher civilizations; social ethics of the family; legal, industrial, educational, and religious problems of the family.

Rural communities.—Conditions of social existence in the country; organization for improvement.

Contemporary charities.—Studies of the nature and origin of depressed and defective classes; principles and methods of relief; organization of benevolence.

Social treatment of crime.—Causes of crime; principles of criminal anthropology; prison systems; legal factors; juvenile offenders; preventive methods.

The structure of English society.—A study of the economic, physiological, social, æsthetic, intellectual, and ethical elements in a typical society.

Philanthropy in its historical development.

The elements and structure of society.—A study of the economic, physiological, social, æsthetic, intellectual, and moral elements in American society; the interrelation of the individual and the group; the problem of social progress in a democratic society.

Municipal sociology.—An examination of the means of satisfying communal wants through public activity, with special reference to British and American cities.

The sociological conception of the State and of government.

The sociological conception of the problems of modern democracy.

SCIENCE.

Electricity and magnetism.—A course of advanced work in theoretical electricity and magnetism.

Physiography.—The earth's features, treated with special reference to their origin and significance; agencies affecting changes in geographic features; physiographic changes in progress; genetic geography.

Economic geology.—A discussion of the nature and distribution of ore deposits and of nonmetallic materials of economic value.

Introduction to mineralogy; physical and geometrical crystallography.—Physical characteristics of crystals; general principles of crystallography; projection and construction of figures of crystals. Groth, *Physikalische Krystallographie*, etc.

Elementary mineralogy and petrology.—This course will include the study of a few of the common rock-forming minerals and of the common rocks.

Descriptive mineralogy and determinative mineralogy.—Essential characteristics of minerals; laboratory work in testing minerals by chemical and blowpipe methods.

The chemistry of ore deposits.—A discussion of the origin of ore deposits and the chemical processes involved in their formation; lectures and laboratory work.

Geographic botany.—This course presents regional and world problems.

Public hygiene.—The application of bacteriology to municipal hygiene; water supply, food supply, sewage disposal, etc.

Sanitary aspects of water and food.—Special study will be given to the physiological and chemical principles of water and foods, including food analysis, food adulteration, money values, and dietaries.

Mechanical drawing.—A course designed to acquaint the student with the principles of mechanical drawing and projection, the preparation of working sketches and drawings, and elementary curve tracing.

The following suggestions on the grouping of courses are added for the guidance of students who are seeking preparation for any of the following activities:

Banking.—Money, banking, financial history of the United States, accounting, trusts, technique of commerce, law of property.

Railroads.—Railway transportation, comparative railway legislation, technique of commerce, American shipping, accounting, training course in statistics.

General industries.—Modern industries, technique of commerce, accounting, banking, money, trusts, economics of workmen, the group of industrials, industrial development of the United States.

Foreign commerce.—History of commerce, commercial treaties, American shipping, industrial development of Europe, industrial development of the United States, colonial economics.

Consular service.—International law, diplomatic history of Europe, diplomatic history of the United States, history of commerce, American shipping, training course in statistics, technique of commerce, American agriculture, commercial treaties.

Journalism.—Development and organization of the press, money, banking, trusts, American shipping, financial history of the United States, American city life, municipal sociology, economics of workmen, comparative government, international law, oral debates, argumentation.

In addition to the courses of study offered by the College of Commerce and Administration, the following course of open lectures was given during the year 1901-1902: The New Education, by Prof. J. Laurence Laughlin, Ph. D., of the University of Chicago; Railroad Management and Operation, by A. W. Sullivan, assistant second vice-president of the Illinois Central Railroad Company; Railways as Factors in Industrial Development, by Louis Jackson, industrial commissioner of the Chicago, Milwaukee and St. Paul Railway; Some Railway Problems, by Paul Morton, second vice-president of the Atchison, Topeka and Santa Fe Railway; Railway Consolidation, by E. D. Kenna, vice-president of the Atchison, Topeka and Santa Fe Railway; Railway Finance (three lectures), by Edwin H. Abbot, A. B., LL. B., formerly president of Wisconsin Central Railroad; The Railway Mail Service, by George G. Tunell, Ph. D., secretary to the president of the Chicago and Northwestern Railway; The Steel Industry, by Franklin H. Head, LL. D.; At Wholesale, by Adolphus C. Bartlett, vice-president of Hibbard, Spencer, Bartlett & Co.; Development of the Forging Industry and Modern Methods of Making Steel Forgings (two illustrated lectures), by H. F. J. Porter, M. E., sales agent of the Bethlehem Steel Company; The Credit Department of Modern Business, by Dorr A. Kimball, credit man of Marshall Field & Co.; The Commercial Value of Advertising, by John Lee Mahin, president of the Mahin Advertising Company; The Textile Industries (three illustrated lectures), by S. N. D. North, A. M., secretary of the National Association of Wool Manufacturers; The Methods of Banking (two lectures), by J. H. Eckels, LL. B., president of the Commercial National Bank, Chicago; The Stock Exchange; Investments, by D. R. Forgan,

vice-president of First National Bank, Chicago; The Board of Trade (two lectures), by George F. Stone, secretary of the Chicago Board of Trade; Fire Insurance, by A. F. Dean, assistant manager of the western department of the Springfield Fire and Marine Insurance Company; Life Insurance, by Willard Merrill, A. B., vice-president of the Northwestern Mutual Life Insurance Company; Foreign Exchange, by H. K. Brooks, manager of the financial department of the American Express Company.

The officers of instruction of the College of Commerce and Administration, as given in a circular of information of August 31, 1901, are as follows: William R. Harper, Ph. D., D.D., LL.D., president of the university, professor and head of the department of Semitic languages and literatures; Harry P. Judson, A. M., LL. D., professor of comparative constitutional law and diplomacy and head of the department of political science; Charles R. Henderson, A. M., D. D., professor of sociology; J. Laurence Laughlin, Ph. D., professor and head of the department of political economy; Albion W. Small, Ph. D., LL. D., professor and head of the department of sociology; Edmund J. James,¹ A. M., Ph. D., professor of public administration; Benjamin Terry, Ph. D., professor of mediæval and English history; J. Franklin Jameson, Ph. D., professor and head of the department of history; George S. Goodspeed, Ph. D., professor of ancient history; Starr W. Cutting, Ph. D., professor of German literature; Adolph C. Miller,² A. M., professor of finance; Oliver J. Thatcher, Ph. D., associate professor of mediæval and English history; Karl Pietsch, Ph. D., associate professor of Romance languages and literatures; Ernst Freund, J. U. D., Ph. D., associate professor of jurisprudence and public law; William I. Thomas, Ph. D., associate professor of sociology; Edwin E. Sparks, Ph. D., associate professor of American history; George E. Vincent, Ph. D., associate professor of sociology; Alex. Smith, Ph. D., associate professor of general chemistry; Charles Zueblin, Ph. B., D. B., associate professor of sociology; Thorstein B. Veblen, Ph. D., assistant professor of political economy; Maxime Ingres, B. ès Lettres, assistant professor of Romance languages and literatures; Francis W. Shepardson, Ph. D., assistant professor of American history; Herbert E. Slaught, Ph. D., assistant professor of mathematics; George C. Howland, A. M., assistant professor of Romance languages and literatures; Camillo von Klenze, Ph. D., assistant professor of German literature; Jacob W. A. Young, Ph. D., assistant professor of mathematical pedagogy; Ferdinand Schwill, Ph. D., assistant professor of modern history; William Hill, A. M., assistant professor of political economy; Paul O. Kern, Ph. D., instructor in Germanic philology; Theodore L. Neff, A. M., Ph. D., instructor in Romance languages; David J. Lingle, Ph. D., instructor in physiology; James H. Boyd, Sc. D., instructor in mathematics; Charles M. Child, Ph. D., instructor in zoology; Ralph C. H. Catterall, A. B., instructor in modern history; Robert A. Millikan, Ph. D., instructor in physics; Henry R. Hatfield, Ph. D., instructor in commerce; James W. Thompson, Ph. D., instructor in European history; Philip S. Allen, Ph. D., associate in German; Wesley C. Mitchell, Ph. D., associate in political economy; Charles G. Merriam, Ph. D., docent in political science.

In his quarterly statement, made at the spring convocation of the University of Chicago, held on March 18, 1903, President Harper said:

By the action of the senate of the university, approved by the trustees, a separate faculty has been established for the conduct of the College of Commerce and Administration. This faculty consists of those instructors, from various departments, selected to give instruction in accordance with the curriculum of the college, and of five members of the university at large, appointed by the trustees. Mr. Henry Rand Hatfield (assistant professor of political economy) has been appointed dean of this college. It is expected that the work of this division will assume a more definite form and take on a more technical character.

¹ Since elected president of Northwestern University, Evanston, Ill.

² Elected professor of political economy and commerce at the University of California.

This institution announces courses of instruction for students desiring special training for commerce, industry, and the public service. Attention is called to the fact that under the liberal system of election a student preparing for business or for the public service may find courses bearing directly on his future life work sufficient to occupy his time for three years, which may be counted toward a regular college degree. The courses especially recommended for such students are those in psychology, modern languages, history, administration, economic theory and economic history, finance, banking, transportation, commerce (with commercial geography), and sociology. The instruction offered in some of the above-mentioned branches is as follows:

Economic theory.—An introductory and elementary course. Recitations, lectures, and frequent written tests. First semester, three hours per week.

Transportation.—An elementary course in the theory and history of transportation. The modern era of turnpikes and canals. The development of the railroad, including the organization, management, and consolidation of corporations; the question of rates and of public control, State and Federal. The railroad as a prime factor in the development of commerce and industry. Hadley's Railroad Transportation and the reports of the Interstate Commerce Commission are used as guides. Second semester, three hours per week.

Administration.—A course in administrative law and the comparative theory and history of administration of the leading modern nations. The course treats of the general field of administrative study and the nature of administrative law, the comparative central administration of the leading countries, together with a study of the legal relations existing between the different organs of administration. Special attention is paid to the organization of the diplomatic and consular services of the different countries. The questions of local administration, with special reference to the organization and administration of cities in the chief modern countries. The separation of local and central functions and the possibility of exercising an administrative rather than a legislative control over the local governments. Two hours per week through the year.

Industrial and commercial history.—The industrial and commercial history of Western Europe and America since the middle of the eighteenth century. The effects of modern inventions and political changes on trade and industry. The economic effects of the formation of the Zollverein; the adoption of free trade by England; the discovery of gold in California and Australia; the American civil war, and the rapid extension of the means of transportation. The effects of political changes in establishing new lines of trade and new centers of industry. The resulting tendency toward concentration and combination of capital and labor. Three hours per week through the year.

Public finance.—Modern systems of taxation; objects and methods of public expenditure; equilibrium of the budget; public loans; the relation of public financing to private economy. In taxation a comparative study is made of the various systems in leading modern countries; and in the United States the relation between existing methods of taxation and the present industrial organization is given special attention. First semester, two hours per week.

Money and banking.—The evolution of money; the standards of various countries, together with an historical survey of the different kinds of money used in the United States; banking functions in the modern business world; clearing houses and systems of credit and their relation to the trade and industry of the country. Second semester, two hours per week.

Commercial geography and international trade.—A general survey of modern commerce. The mechanism, organization, and instruments of international trade; the factors determining the values of commodities; the points of origin and methods of producing and preparing for the market and transporting the more important articles entering into the commerce between nations; the relation of the Government and of centers of production to national commercial supremacy. One hour per week through the year.

Labor question in Europe and the United States.—Economic condition of the working classes in Europe and the United States during the past century; relation of labor organizations to capital in the production and distribution of wealth; rise and growth of labor organizations; the development of the labor contract; methods of industrial remuneration; the shorter working-day; workingmen's insurance, and employers' liability. Three hours per week through the year.

Tariff and financial history of the United States.—Three hours per week through the year.

UNIVERSITY OF ILLINOIS, URBANA, ILL.

Beginning with the scholastic year 1902-1903 this institution offers "courses of training for business." The courses consist of work regularly organized in the college of literature and arts leading to the degree of Bachelor of Arts. The requirements for admission are the same as those for entrance to the university in the course in literature and arts. Students in the college of science and college of agriculture, as well as engineering students, can so arrange their courses that they may take a considerable amount of work in business administration.

In order to graduate from the university in the courses of training for business, the student must do the work prescribed for all students in the college of literature and arts, that prescribed for all students in industry and commerce, and that required for the particular line that he elects to follow. He must also in his senior year write a thesis on some topic directly connected with the line of business he is planning to enter, and secure, in all, 130 hours' credit. Students are urged to take one or two years of graduate work in their special lines after completing the undergraduate course of four years.

The subjects required of all students in the college of literature and arts, irrespective of their future course of study, are as follows: Advanced algebra, 2 or 3 hours; English literature, 4 hours; French or German, 8 hours; geometry, solid and spherical, 3 hours; history, 6 hours; logic, 3 hours; military, 5 hours; physical training, 2 hours; natural science, 8 to 10 hours; rhetoric, 6 to 10 hours; trigonometry, 3 or 2 hours. This work amounts to from 50 to 56 semester hours,¹ and must be taken in the first two years of the course. It does not take up all of the student's time through the two years, and he may fill up his schedule of studies by elections of certain of the subjects offered especially for business training.

In addition to the above general requirements, the following subjects are required of all students, whichever one of the courses in business training they wish to pursue: Principles of economics, commercial geography; English economic history; economic history of the United States; French two years, or German three years, beyond the freshman year; elements of commercial law; courses in business correspondence, or, for students preparing for journalism, English composition.

The subjects offered for business training are so grouped as to furnish specific training for (1) trade; (2) banking; (3) transportation, especially railroad transportation; (4) journalism; (5) insurance. Students who enter the several courses should take from the following subjects, among others, in addition to the general requirements mentioned above, sufficient to secure, in all, 130 hours' credit:

General course in business training.—Labor problems; corporation management and finance; industrial consolidations; commercial politics; commercial policy of the United States; materials of commerce; generation and transmission of power.

Course in banking.—Money; financial history of the United States; public finance; money market; statistics; history of commerce; banking; elements of corporation law.

Course in transportation.—Statistics; industrial consolidations; labor problem; railway management; railway systems; elements of corporation law; materials of commerce; elements of drafting; maintenance of way; machinery and manufacturing; locomotive and steam railways; electric railways; generation and transmission of power.

Course for journalism.—American history; colonial policy; charities and correction; commercial policy of the United States; constitutional law; elements of commercial law; English literature; financial history of the United States; indus-

¹ A semester hour is one class period per week, presupposing two hours of preparation, for one half-year; or an equivalent amount of time spent in laboratory or shop practice.

trial consolidations; international law; labor problem; municipal corporations; political ethics; political institutions; public finance; socialism and social reform; taxation; money market.

Course in insurance.—Corporation management and finance; economics of insurance; public finance; money market; statistics.

The instruction offered in some of the subjects is as follows:

ECONOMICS, COMMERCE, AND INDUSTRY.

Principles of economics.—This course is introductory to the more advanced courses. Attention is confined to the underlying principles of the science. Three hours.

Principles of economics.—This is a course in general economics offered primarily to junior and senior students of high standing in the colleges of agriculture, engineering, science, and law. Emphasis is laid on the practical side of economic questions. Two hours.

Principles of economics.—This is the same as the preceding with the addition of one lecture per week on practical economic questions by Professor Kinley. Three hours.

Money.—This course is devoted to an elementary study of the history and theory of money and the monetary history of the United States. Three hours.

Financial history of the United States.—This course deals with the growth and management of the national debt, national taxation, and monetary policy. Three hours.

Public finance.—This course consists of a critical comparative study of financial theories and methods. Special attention to American conditions. Three hours.

Taxation.—A detailed study of State and local taxation in the United States. Two hours.

English economic history.—Special attention is directed to the evolution of modern industrial institutions. Two hours.

The money market.—This is an advanced course dealing with rates of exchange, functions of bill broker and banker, causes of fluctuations in rates of discount, the concentration of financial dealings at such centers as New York and London, international payments, and the determination of rates of foreign exchange, the effect of different monetary standards on international payments, monetary panics and crises, and the financial aspects of dealings on the stock and produce exchanges. Three hours.

Banking.—This course consists of a study of the history and theory of banking with special reference to the banking experience of the United States, and of a study of the existing banking systems and practices of various countries, particularly the United States, England, Germany, France, and the Orient. Three hours.

History of economic thought.—This course takes up the history of the development of economic theory since the sixteenth century. Two hours.

Industrial consolidations.—This course will treat of the development of industrial consolidations, the causes at work producing them and their forms in Europe and America; the promotion, financiering, incorporation, and capitalization of corporate consolidations; monopoly prices and monopoly methods: the ability of trusts to affect prices, wages, interest, and profits; and the proposed plans for controlling trusts, such as publicity, taxation of profits, and public ownership. Three hours.

The labor problem.—This course is a study of the labor movement and its social significance. The progress of the laboring classes, the legal relations of employers and employed, wages, strikes, arbitration, labor organizations, and similar topics are studied and serve to show the general character of the course. Three hours.

Railway management.—A study of the theoretical and practical aspects of railway transportation, with especial reference to American conditions. Some of the topics are the historical development of railroads, principles of construction, operation and traffic management, organization and finance, methods of control. Two hours.

Railway systems.—A comparative study of the railway systems of the United States, England, Germany, France, Australia, etc., with special reference to methods of management, control, and economic effects. Two hours.

Charities and corrections.—This course begins with the history of poor relief in Europe and the United States. As full a discussion of the various methods of reform and prevention is given as the time will permit. Two hours.

Sociology.—This course comprises an elementary presentation of social principles and phenomena and a brief discussion of some of the recent theories advanced to explain the growth and structure of society. Two hours.

Economic seminary.—Advanced students are formed into a seminary for investigation and for the study of current economic literature. Students who write their theses in economics must do so in connection with the seminary work. Four hours.

The industrial organization of modern Europe.—A study of the industrial conditions, methods, and organization of the leading European countries, with special reference to international competition and the foreign policy of the various Governments. Three hours.

Corporation management and finance.—The growth of corporations; their organization and securities, position and relations of stockholders and directors, analysis of reports, stock speculation, relation of industrial corporations to international competition, receiverships and reorganizations, social and political effects. Three hours.

Socialism and social reform.—This course is a study of the nature of socialism and of its strength and weakness as a scheme for the production and distribution of wealth, with a historical and critical examination of socialistic theories and propositions for social reform put forward during the nineteenth century. Three hours.

Economic history of the United States.—This course is an inquiry into the trend of our development and into the physical, economic, and political forces which have directed and controlled it. The physical conditions under which our people have worked, the movement and character of our population, the interaction of our political and economic life, our position in the world's industry and commerce, the problem of territorial expansion in its relation to our industrial and commercial growth, are some of the topics discussed. Attention is given to the history of some specific great industries, such as the iron and steel industry, cotton manufacture, shipping question, etc. Three hours.

Statistics.—This is a course in descriptive statistics, intended to familiarize students with the statistical literature of economics. One hour.

Statistics.—This course is the same as mathematics where the description is given. Students of economics should take this course and the preceding together. Those who do not wish the mathematical theory of probability may drop out of the class when that part of the subject is reached. For them the mathematical requirements for entrance will not be enforced, and both courses will count for four hours' credit. All who take the course must take both parts of it, as described under mathematics, which see.

Public control of trade and industry.—This course is an economic and financial study of the practical results of the public regulation of private business enterprises, and the public control, ownership, and operation of public service corporations such as street railways, waterworks, gas and electric light plants, docks, and markets. Three hours.

Commercial geography.—This course comprises a study of the natural and artificial conditions of the various countries and the effects of these conditions upon their industrial development and international commerce. Two hours.

History of commerce.—This course comprises a historical survey of commerce from ancient times, with special stress on the growth of commerce since the discovery of America. Two hours.

Institutes of commerce.—This course comprises a discussion of such subjects as kinds of commerce, the importance and organization of commerce and the management of commercial transactions. Two hours.

Institutes of commercial politics.—(1) Domestic commercial politics, comprising a discussion of trade restrictions, of protection against unlimited competition and against the misuses of credit, etc. (2) Foreign commercial politics, including, among other subjects, a discussion of the aims of foreign commercial policy, of the different kinds of tariffs, commercial treaties, bounties, subsidies, etc. Two hours.

History of the commercial policy of the United States.—This course includes a historical study of all those measures, such as tariff legislation, commercial treaties, laws regulating coastwise navigation, tonnage duties, reciprocity arrangements, bounties, subsidies, consular matters, etc., which have an important bearing on the commercial side of the foreign relations of the United States. Four hours.

History of the commercial relations between the United States and Germany.—This is to be followed in later years by the history of the commercial relations of the United States with other powers. One hour.

Economics of insurance.—The course consists of a brief study of the historical development of insurance, followed by a more extended discussion of its economic aspects. The various forms of insurance—fire, accident, employment, and life—are

considered from the standpoint of internal organization and from that of social service. Special attention is given to the theories and practices relating to rates, policies, investments, corporate management, accounting, public supervision, and insurance law. Three hours.

The theory of value.—This is a historical and critical study of theories of value. (Graduate work.)

The distribution of wealth.—This course deals with the problem of distribution, both in theory and practice. The facts of distribution of wealth and of income are first discussed, and attention is then turned to a comparison of theories of wages, interest, and profits. An attempt is made to show the relation of the existing distributive process to social prosperity and progress. (Graduate work.)

Seminary in commerce.—A seminary for graduate students, devoted to a study of present international commercial relations, with special reference to the trade conditions of the United States and the extension of her trade to foreign markets. The basis of this work will be a study of the statistical and commercial reports of the American and foreign Governments, as well as a study of board of trade and other journals devoted to the interest of foreign and domestic commerce. The primary aim will be to familiarize the student with the principal sources of information on commercial subjects. (Graduate work.)

Research courses in selected subjects. (Graduate work.)

GOVERNMENT. (SCIENCE OF).

Political institutions.—This is an elementary course in historical and practical politics. After a brief preliminary survey of some of the fundamental principles of politics, a comparative study of the political systems of the United States and the leading countries of Europe is made, with special reference to their historical development and practical operation. Six hours.

HISTORY.

Medieval and modern European history.—Elementary introductory course. Three hours.

Historical introduction to contemporary politics.—The political history of the nineteenth century. Three hours.

American history.—The origin and growth of the nation from the beginning of English colonization in America to the close of the reconstruction period. Five hours.

English constitutional history.—Three hours.

The colonial interests and colonial policies of the European powers.—Special attention is given to the nineteenth century. Three hours.

English history.—A general course in the history of England from the migrations until 1815. Four hours.

LAW.

Elements of jurisprudence.—The origin, development, and classification of law, followed by an introduction to the fundamental principles of the common law. Text-books: Blackstone's Commentaries, Robinson's American Jurisprudence. Four hours.

Elements of commercial law.—A course dealing with those branches of substantive law most commonly employed in mercantile pursuits. The work of the first semester covers the main principles underlying the law of contracts. The leading English and American cases are referred to, but the instruction is based upon lectures and collateral reading in the best text-books. In the second semester the fundamental doctrines of contracts are studied in their application to the law of negotiable securities, railroads and other common carriers, pledges and chattel mortgages, insurance and bankruptcy. Four hours.

Elements of corporation law.—Legal relations. A study of the legal principles involved in the organization and operation of the modern corporation, the constitutional and statutory limitations, both State and Federal, and questions arising under interstate comity. Lectures and assigned readings in cases and texts. Two hours.

Civil law of the Spanish-American colonies.—This course is intended especially for those who intend to be connected with business houses having to do with commerce between the United States and the Spanish-American countries. Two hours.

Contracts.—Text-book, Keener's Cases on Contracts. Three hours.

Roman law.—Text-book, Sohm's Institutes of Roman Law. Four hours.

Insurance.—Text-book, Wambaugh's Cases on Insurance. Two hours.

MATHEMATICS.

Statistical adjustments.—This course is given in two parts, of which the first may be taken alone.

(a) Theory of statistical adjustments: This part of the course includes a discussion of the general method of statistical investigation, the arithmetical and geometrical average, application of averages to tabulation, graphic methods of deducing the law of error, interpolation, and the application of the theory of probability to statistics. Two hours.

(b) Applications: A problem course in which the applications of the principles developed in (a) are made to specific problems in economics, biological science, insurance, etc. Two hours.

MATERIALS OF COMMERCE.

Agricultural.—A study of the animals, grains, fruits, vegetables, and forage crops entering the channels of trade, together with a sketch of their manufactured products and by-products. This would embrace the following:

Horses and mules and their market classes; hogs, beef cattle, and mutton sheep, together with fresh, refrigerator, and canned meats, and the by-products of slaughterhouses, such as leather, hair, gelatine, medicinal extracts, horn, bone, fertilizers, etc.; poultry—meat, feathers, and eggs; milk and its manufactured products—cream, butter, cheese, kumiss, etc.; wool, cotton, felt, shoddy; grain for human consumption, as wheat, rye, etc.; grains and forage for animal consumption, as corn, oats, barley, hay, straw, stover; grains and vegetables worked for sugar, starch, oil or spirits, as corn, barley, rye, potatoes, sugar beets, and their by-products used for stock feeding; fruits. Two hours.

Chemical.—Classification and review of the chemical industries, including related lines which depend for their success upon chemical processes. A further study in detail of typical industries, as for example, paints and painting, theory of paint composition, materials, substitutes, adulterants, methods of manufacture, future lines of probable development, etc. Two hours.

Geological (economic geology).—This course is devoted to a study of the uses man may make of geologic materials, the conditions under which these materials occur, and the qualities which render them valuable. A series of laboratory exercises on ores, soils, and structural materials runs parallel with the lecture course. Five hours.

Vegetable (economic botany).—Commercial plants and plant products. This is a study of the plants themselves from which are derived important commercial products, the conditions under which the latter are developed, and the methods by which they are obtained and utilized. Substitutions and falsifications and their detection are studied. Two hours.

Zoological.—This is a study of the origin and economic uses of economic products derived from the animal kingdom, aside from those ordinarily classed as agricultural. It will include the fisheries (marine and fresh water), products of fur-bearing animals, bees, the silk worm, etc. Injuries by insects to stored merchandise and other manufactured property will be discussed with reference to measures of prevention and remedy. Two hours.

MECHANICAL TECHNOLOGY.

Elements of drafting.—Geometrical constructions; orthographic, isometric, and cabinet projections. Tracy's Mechanical Drawing. Three hours.

Shop practice.—Students in transportation will be given training either in the machine shop, wood shop, foundry, or the forge shop, according to the circumstances of the case. Three hours.

Maintenance of way.—Development of maintenance of way; general relations to transportation problems and railway development. Character of permanent way as related to financial conditions. Signal systems. Two hours.

Machinery and manufacturing.—Classification, construction, operation, and erection of "form-changing machines." A study of machinery that transforms raw material into a finished product. Manufacture *v.* building; hand labor *v.* automatic machinery; the American system of interchangeable machine parts. Three hours.

Locomotives and steam railways, electric railways.—General treatment, giving peculiar adaptations and limitations of steam and electric roads; their adoption as determined by character of country or service and distance. Probable future changes in the latter; essential differences in operation. Two hours.

Generation and transmission of power.—Elementary principles of generation and transmission of power. Applications of power for purposes of agriculture, manufacturing, mining, and transportation on land and water. Two hours.

PHILOSOPHY.

Political ethics, historical and applied.—A study of various phases of thought concerning the ethics of social organizations; theories of the nature of the state, including views of the state of nature, of natural law, and natural right. A discussion of rights and duties in relation to social institutions; international rights and duties; the ethics of diplomacy. Two hours.

RHETORIC AND ORATORY.

Business writing.—English composition for students preparing for business careers. Business correspondence, the making of summaries and abstracts, advertising, proof reading, and the preparation of manuscript for the press. Four hours.

OTHER COURSES.

Accounting.—This course furnishes opportunity to study the general principles of accounting and auditing adapted to modern business. Public accounts of railroads, banks, and other corporations are studied with a view to teaching students how to interpret them and how to devise systems of accounting suitable to particular business enterprises. The work is done in the main in the courses on banking, railroads, etc., but is supplemented with special lectures.

Commercial grading of grains.

The instructors who give courses prescribed for students in business administration are as follows: David Kinley, Ph. D., professor of economics; George M. Fisk, Ph. D., professor of commerce; Maurice H. Robinson, A. M., professor of industry and transportation; Matthew B. Hammond, Ph. D., assistant professor of economics; Nathan C. Weston, Ph. D., instructor in economics; Evarts B. Greene, Ph. D., professor of history; James B. Scott, J. U. D., Charles C. Pickett, LL. B., and Charles W. Tooke, LL. B., professors of law; Thomas A. Clark, B. L., professor of rhetoric; Lewis A. Rhoades, Ph. D., professor of German language and literature; George D. Fairfield, A. M., professor of Romanic languages; Thomas J. Burrill, Ph. D., professor of botany and horticulture; Charles W. Rolfe, M. S., professor of geology; Samuel W. Parr, M. S., professor of applied chemistry; Frank Smith, A. M., assistant professor of zoology; James D. Phillips, B. S., assistant professor of general engineering drawing; Edward C. Schmidt, M. E., assistant professor of railroad engineering; Gerdt A. Gerdtzen, M. E., assistant professor of machine design.

INDIANA UNIVERSITY, BLOOMINGTON, IND.

A commercial course will be inaugurated at the opening of the university year, October 1, 1902, and will cover the last two years of the regular university course. The first two years at the university are to be devoted to the regular course of studies, and all required subjects should be finished during that time. In addition, the student will be required to take, as a preparation for the commercial course, three terms' work in the department of history, and also elements of political economy and the principles of commerce.

The following is a provisional curriculum of the two years' work in the commercial course:

First year (third year of university course).—Economic history of England, two hours; economic history of the United States, four hours; business and commercial law, three hours; business organization and management, three hours; transportation, three hours; American history, nine hours; American politics, six hours; modern language (French, German, Spanish), fifteen hours; or modern language nine hours and physiography six hours.

Second year (fourth year of university course).—Money and banking, four hours; public finance, three hours; financial history of the United States, three hours; commercial geography, three hours; theory of distribution, two hours; international law, six hours; modern European history, three hours; American history, six hours; political institutions, six hours; modern language, nine hours.

LOUISIANA STATE UNIVERSITY, BATON ROUGE, LA.

This institution offers a commercial course extending through four years and leading to the degree of Bachelor of Science, as follows:

FRESHMAN YEAR.

First term.	Hours per week.	Second term.	Hours per week.
English.....	5	English.....	5
Mathematics.....	5	Mathematics.....	5
Commercial geography.....	3	Commercial geography.....	3
Physics.....	2	Physics.....	2
Commercial arithmetic.....	10	Stenography.....	2
		Bookkeeping.....	6

SOPHOMORE YEAR.

English.....	3	English.....	3
Mathematics.....	3	Surveying.....	3
Physics.....	3	Physics.....	3
Spanish.....	3	Spanish.....	3
Economics.....	3	Economics.....	3
Bookkeeping.....	6	Bookkeeping.....	6
Stenography.....	2	Field work—surveying.....	4

JUNIOR YEAR.

English.....	3	English.....	3
French or German.....	3	French or German.....	3
Spanish.....	3	Spanish.....	3
History.....	3	History.....	3
Law.....	5	Law.....	3
Money and credit.....	3	Statistics.....	4
		Bookkeeping.....	4

SENIOR YEAR.

English.....	2	English.....	2
French or German.....	3	French or German.....	3
Psychology.....	3	Ethics.....	3
Economics.....	2	Economics.....	2
Constitutional law.....	3	International law.....	3
Spanish.....	2	Spanish.....	2
Military science.....	2	Military science.....	2
History.....	3	History.....	3

UNIVERSITY OF MICHIGAN, ANN ARBOR, MICH.

To meet the wants of students who wish to pursue the study of history, economics, and subjects allied thereto for purposes of specialization and with reference to the careers they have in view, provision has been made for the extension and the systematic grouping of all the courses of study offered in those departments in such a way as to enable a student to plan his work in an orderly manner.

Two special courses have been organized, one in higher commercial education and the other in public administration. In the former the aim is to give a scientific training in the structure and organization of modern industry and commerce, and thus enable the student quickly to master the technique of any business career. In the latter the aim is to give a knowledge of the fundamental principles of political organization and of the methods and practice of public administration.

The course in higher commercial education covers three years of systematic instruction, and in the case of candidates for a degree, should be elected at the beginning of the third year of university residence. If all graduation require-

ments are met, the degree of Bachelor of Arts is conferred at the close of the second year of the special course and the degree of Master of Arts at the close of the third year. The first two years of residence should be devoted to collegiate studies and to studies preparatory to the special course. The courses in mediæval and modern history, English history, history of the development of industrial society, and the course in the elements of political economy should be completed during the first two years of residence.

The following programme is suggested to students:

THIRD YEAR IN THE UNIVERSITY.

First semester.—Social and industrial reforms, 4 hours;¹ commercial geography of the extractive industries, 3 hours; theory and history of money, 2 hours; general electives, 7 hours.

Second semester.—Science of finance, 3 hours; commercial geography of the manufacturing industries, 3 hours; theory and history of banking, 2 hours; statistics, 1 hour; general electives, 7 hours.

FOURTH YEAR IN THE UNIVERSITY.

First semester.—Problems in political economy, 4 hours; resources and extractive industries of the United States, 3 hours; commercial law, 3 hours; science of accounts, 2 hours; general electives, 4 hours.

Second semester.—Administration of corporate and public industries, 2 hours; manufactures of the United States, 3 hours; commercial law, 3 hours; history of industrial chemistry, 2 hours; general electives, 6 hours.

FIFTH YEAR IN THE UNIVERSITY.

First semester.—The distributive and regulative industries of the United States, 3 hours; technique of foreign trade, 3 hours; money market, 2 hours; labor laws of the United States and Europe, 2 hours; thesis seminary, 2 hours.

Second semester.—Transportation problems, 3 hours; European commercial geography, 2 hours; American trade with China, Japan, and the Philippines, 2 hours; history of industrial physics, 2 hours; business organization, 2 hours; thesis seminary, 2 hours.

The instruction offered in some of the branches is as follows:

INDUSTRY AND COMMERCE.

Commercial geography of the extractive industries.—Lectures and topical reports. The design of this course is to present the technical and trade conditions which determine the success or failure of the chief extractive industries, such as agriculture, horticulture, forestry, fisheries, and mining.

Commercial geography of the manufacturing industries.—Lectures and topical reports. This is a continuation of the above course, and presents the chief technical processes and trade relations of the manufacturing industries.

The resources and extractive industries of the United States.—Lectures and assigned readings. A study of the natural and social resources of the United States and of the chief extractive industries to determine their location, present condition, and relations to each other.

The manufactures of the United States.—Lectures and assigned readings. The evolution, present location, and condition of our chief manufacturing industries will be presented, and the relations of these industries to one another, to sources of raw materials, transportation, and market facilities, and foreign trade.

The distributive and regulative industries of the United States.—Lectures and assigned readings. This course will include a description of the various methods of marking goods, of the classifications, grades, brands, and trade-marks employed, and of wholesale and retail trade, jobbing, etc. Attention will also be given to those private organizations, not connected with money and banking, which guide

¹ Per week.

and control the industrial process, such as trade associations and trade papers, boards of trade and chambers of commerce, stock and produce exchanges, national and export associations, museums and expositions.

Technique of foreign trade.—This course treats of the supply and demand areas of the world, with special reference to the chief articles of international trade. It comprises a study of the documents, regulations, and customary procedure of foreign trade, including methods of selling goods in foreign countries, shipping routes, customary packages, weights and measures, tariffs, export bounties, commercial treaties, and foreign industrial legislation.

European commercial geography.—Lectures and assigned readings. A presentation of the resources and industries of the chief European states, particular emphasis being laid upon openings for American trade.

American trade with China, Japan, and the Philippines.—This course will include a statement of the resources and industries of the countries mentioned, and a consideration of the present and probable future trade of the United States with them.

Science of accounts.—This course is designed to give the student an insight into that phase of administrative management which has been styled "the vital element of business." It assumes that the student is familiar with the simpler forms of bookkeeping. A study will be made of the methods used by auditors in conducting investigations, illustrations from the business world forming the basis of this part of the work. Considerable time will be devoted to a consideration of the essential data concerning the various lines of commercial enterprises, which must be furnished to the financier by the accountant in order that correct deductions may be made with regard to the needs of the business under discussion and the means which must be taken to increase its efficiency.

History of industrial chemistry.—The purpose of this course and of the course in general chemistry which is required for its election is to familiarize students with the significance of chemistry in the process of manufacture and to enable the factory manager to understand the reports of laboratory experts. He learns chemical nomenclature, chemical laws and principles, and something of the purpose of chemical tests and investigations in the general course given by the chemical department as introductory to further study. In the present course he learns of the manner in which chemical principles have been applied in the development of chemical technique, and prepares himself to judge intelligently proposals for the further application of such principles.

History of industrial physics.—The purpose of this course is, in general, the same as that of history of industrial chemistry.

Thesis seminary.—This seminary is confined to students in the course in higher commercial education. Its chief purpose is to hear reports from such students as are required to present a thesis for graduation. It will also be made the occasion of lectures from men not regularly connected with the academic staff of the university, in which case all students enrolled in the course in higher commercial education will be expected to attend.

GENERAL AND COMMERCIAL LAW.

Commercial law.—It is the design of this course to instruct students in the fundamental principles of law, so far as these principles pertain to the ordinary activities of business life. It is a three-hour course throughout the year, comprising two lectures and one quiz upon lectures and assigned readings each week. The topics covered by this course are as follows:

First semester.—Elementary law (six lectures); contracts (twelve lectures); agency (eight lectures); sales (ten lectures).

Second semester.—Bailments and carriers (eight lectures); bills of exchange and promissory notes (eight lectures); partnership (eight lectures); corporations (twelve lectures).

Public corporations.—Two hours a week. Second semester. Lectures.

The science of jurisprudence.—One hour a week. Second semester. Text-book, accompanied by oral exposition.

Taxation.—One hour a week. Second semester.

Public officers.—One hour a week. First semester.

Private international law.—Two hours a week. First semester.

In addition to the regular course noted above, the lectures on the following topics are open to students in the course in higher commercial education: Insurance (Dr. M. M. Bigelow); mining law (Mr. Clayberg); patent law (Mr. Walker); copyright law and trade-marks (Mr. Reed); railway law (Professor Knowlton).

POLITICAL ECONOMY AND FINANCE.

Elements of political economy.—This course is introductory to all other courses in political economy. The weekly quiz covers both the lectures and some standard text announced at the beginning of the semester. The ground covered in the lectures includes the usual topics—production, exchange, and distribution.

History of the development of industrial society.—A study of the history of English industrial society from the twelfth century to the present time, designed to show how modern industrial customs and rights came into existence.

Principles of the science of finance.—Finance as here used is not concerned with money or banking, but treats of public expenditure, public revenue, and public credit.

Public finance.—A comparative study of financial legislation and administration among the leading nations.

Problems in political economy.—The problems studied are as follows: The immigration problem, industrial crises, free trade and protection, the railway problem, the municipal or trust problem, and taxation.

Social and industrial reforms.—The special problems studied are the following: Cooperation, profit sharing, communism, socialism, factory legislation, working-men's insurance, trades unions, and industrial federation.

Transportation problems.—The social and industrial significance of modern transportation, the development of railway transportation in this country and in the more important European countries, the administrative and legislative organization of railway systems, the history of the railway problems of the United States, and the control of railways through commissions.

Administration of corporate and public industries.—An analysis of industrial organization primarily from the administrative point of view. It considers the history and social significance of rapid transit in cities and other quasi public industries, both public and private. It studies railway administration under public as well as private ownership, and makes a special investigation into the history, organization, and administration of the post-office department of this and other countries.

Theory and history of money.—The first half of the semester will be occupied with a fuller study of special topics. Among these will be the value of money, the theory of the standard, and regulation of the paper money. The second half of the semester will be given to the history of money, particularly in the United States.

Theory and history of banking.—Among the topics considered will be the nature and social functions of banking, the natural laws of banking phenomena, systems of regulation, etc.

Economic theory.—Ingram's History of Political Economy will serve as a basis for this course, but much of the time will be given to the study of masterpieces.

Economic theory.—History of opinion on leading problems. The work will be conducted somewhat after the fashion of a seminary. Open only to advanced students.

The theory and practice of statistics.—This course treats statistics as a method of social research, an instrument important not only to economists and statisticians, but also to all who wish to qualify themselves to understand or criticize current social and political discussion. The class read Mayo-Smith's Statistics and Sociology, and, in addition, each member is assigned an exercise intended to afford some practice in collating statistical material and presenting it in tabular and graphical form. Advanced students only are allowed to elect the course.

Seminary in economics.—Two hours.

Seminary in finance.—Two hours.

The course in public administration covers three years, and, like the course in higher commercial education, should be elected at the beginning of the third year of university residence. The following programme is presented as suggesting an appropriate order of elections:

THIRD YEAR IN THE UNIVERSITY.

First semester.—History of Europe from the peace of Westphalia to the close of the French revolution, 3 hours; political and constitutional history of the United States, 3 hours; constitutional law and political institutions of the United States, 3 hours; American administrative law, 3 hours; public officers, 1 hour; general electives, 3 hours.

Second semester.—History of Europe since the French revolution, 3 hours; political and constitutional history of the United States, 3 hours; administrative law in European countries, 3 hours; taxation, 1 hour; general electives, 6 hours.

FOURTH YEAR IN THE UNIVERSITY.

First semester.—Present problems of European politics, 3 hours; English political institutions, 2 hours; municipal administration, 3 hours; private international law, 2 hours; general electives, 6 hours.

Second semester.—Comparative study of the political institutions of France, Germany, Switzerland, and other continental states, 3 hours; municipal administration, 3 hours; the government of Michigan, 2 hours; public corporations, 2 hours; general electives, 6 hours.

FIFTH YEAR IN THE UNIVERSITY.

First semester.—Seminary in administration, 2 hours; research course for the study of present problems of European politics, 2 hours; seminary in American history, 2 hours.

Second semester.—Seminary in administration, 2 hours; research course for the study of present problems of European politics, 2 hours; seminary in American history, 2 hours.

The instructors whose principal work lies in history and political science are as follows: James B. Angell, LL. D., president, lecturer on international law; Henry C. Adams, LL. D., professor of political economy and finance; Richard Hudson, LL. D., professor of history; Andrew C. McLaughlin, A. M., LL. B., professor of American history; Fred M. Taylor, Ph. D., junior professor of political economy; Earle W. Dow, A. B., assistant professor of history; Charles H. Cooley, Ph. D., assistant professor of sociology; John A. Fairlie, Ph. D., assistant professor of administrative law; Edward D. Jones, Ph. D., assistant professor of commerce and industry; Arthur L. Cross, Ph. D., instructor in history; Duran W. Springer, B. S., lecturer on the science of accounts; Harlow S. Person, A. M., instructing fellow in economics; Andrew H. Wood, assistant in history; Theo. J. Zimmerman, fellow in American history.

In his report for the year ending September 30, 1901, President Angell says:

The courses which were established last year for giving instruction in higher commercial education and administrative law have attracted much attention. They have been highly commended in the public press, and have deeply interested some of our most earnest students. The organization of the work was necessarily tentative and experimental. A number of eminent specialists assisted us by brief courses of lectures. We have now added to our faculty Dr. E. D. Jones, formerly of the University of Wisconsin, as assistant professor of commerce and industry. We shall also have again the aid of some special lecturers. The almost simultaneous establishment of similar courses of work in several of the leading colleges and universities shows that there is a widespread demand for them. Fortunately for us, we had in our various departments a large force of teachers whose work properly coordinated was easily made tributary to the ends sought by the establishment of these new courses. In our special announcement the names of no less than twenty-five teachers appear.

NEVADA STATE UNIVERSITY, RENO, NEV.

The School of Commerce offers a course of study extending through four years and leading to the degree of Bachelor of Science. The requirements for admission are the same as for the other university schools. The course is as follows:

Freshman year.—English literature and composition, German, algebra, solid geometry, trigonometry, general history, stenography or accounting.

Sophomore year.—German, general chemistry, mediæval history industrial economics, geography of commerce, stenography or accounting.

Junior year.—German, French, organic and industrial chemistry, history of England, municipal and international law.

Senior year.—French, Spanish, principles of economics, political economy, finance and trade, political history of the United States.

In addition to the subjects named in the junior and senior years, considerable reading and investigation in geography, history of commerce, and the political and economic conditions of the chief trading nations are required.

DARTMOUTH COLLEGE, HANOVER, N. H.

The Amos Tuck School of Administration and Finance was established in 1900 on an endowment of \$300,000, granted to Dartmouth College by Mr. Edward Tuck, a graduate of the college in the class of 1893. By a second gift of \$100,000 Mr. Tuck has made provision for the erection and maintenance of a building for the use of the school.

The object of the school is to train college graduates who desire to engage in affairs rather than to enter the professions. The instruction offered is intended to prepare men to enter upon private banking, brokerage and investments, insurance, railroad service and water transportation, foreign trade, general mercantile or manufacturing businesses, journalism, consular service, or for active participation in municipal and civic affairs.

The course of study extends through two years and is intended as a graduate course. The first-year courses of the school may be elected by seniors in Dartmouth College. The work of the first year is largely required, consisting mainly of courses in modern languages, advanced history, advanced economics, American constitutional and international law, sociology, money and banking, and the history and theory of transportation. From these courses the student must choose eighteen hours each semester.

The work of the second year permits of wider choice within the range of the following subjects: Modern languages continued, modern history and diplomacy, municipal administration, accounting and auditing, theory and technique of statistics, business organization and procedure, commercial law, commerce, rail and water transportation, insurance, practical banking, investments, and public finance.

The scope of the courses of instruction offered is shown in the following outline:

MODERN LANGUAGES.

A. *French.*—Composition and conversation.

B. *German.*—Composition and conversation.

C. *Spanish.*—Composition and conversation.

During the first year, two of the three languages are to be elected, and one of these during the second year. Students will enter upon the grade of language work which their previous preparation permits. Those whose equipment in one or more of these languages is considered adequate, will be permitted to substitute electives therefor.

D. *English.*—See Business Organization and Procedure, H.

ADVANCED HISTORY.

A. *The history of England to the sixteenth century.*—This course will consist primarily of the political history of the English nation, with such reference as is necessary to constitutional, economic, and intellectual development.

B. *The history of England and the British Empire from the sixteenth century.*—This is a continuation of Course A, and will include, in addition to the history of Great Britain, the development of the British Empire and the history of its colonies and dependencies.

C. *American colonial history to 1783*.—This course is intended to trace the beginnings of the American nation rather than the details of the history of the individual colonies. Emphasis is therefore laid on the European inheritance brought to this country by the colonists, their development of American institutions in the new environment, the expansion of population, the struggle between French and English for North America, the underlying causes of the Revolution, the growth of independence and union.

D. *European political history, 1789-1878*.—This course will open with a review of the geography of Europe and lectures on the various nationalities, the state of the leading countries on the eve of the French revolution and the early stages of that movement. It will continue with text-book work, supplemented with lectures on the part of the instructor and varied exercises on the part of the students.

E. *United States political history, 1783-1877*.—This course will be conducted in substantially the same way as the work of the previous course.

F. *Modern history*.—This course will consist of lectures on the political history of Canada, Mexico, and the South American States, Asia and Africa, with special emphasis on recent developments and particular reference to the phases of their history which might bear on their relations with this country. Under the direction of the instructor the students will do constructive work in the political history of Europe since 1878, each student covering a given period and profiting from the results of the work of other students.

ADVANCED ECONOMICS.

A. *American industrial development*.—Brief treatment of the earlier period of national development, followed by a more careful study of the history since the civil war. This will include the consideration of agricultural conditions and problems both North and South; special study of some of the more important products, such as iron, coal, wheat, and cotton; the development of the great manufacturing industries: the growth of corporations, trusts, and monopolies, and a consideration of the relations of labor and capital as influencing industrial progress.

B. *Advanced theory*.—A study of the development of economic theory. Assigned readings in the works of the classical school, especially Smith, Ricardo, and Mill, and in the writings of the representatives of modern development—Marshall, Boehm-Bawerk, Patten, Clark, and others.

LAW AND DIPLOMACY.

A. *American constitutional law*.—This course is designed to give students a knowledge of the general principles of the constitutional law of the United States, both Federal and State. Particular attention is given to the origin and development of American political institutions, to the formation of State governments, and to the immediate causes of the adoption of the Federal Constitution, and to its text.

B. *Politics and administration*.—A study of American political parties since 1873; their organization and increasingly centralized control; their policies and methods chosen for executing them; existing electoral machinery, its practical workings and defects; some proposed remedies.

C. *International law*.—This course is historical and explanatory of present international relations. It treats of the origin and development of the rules that generally govern the intercourse of modern civilized States, and their recent modifications by treaty.

D. *Diplomacy*.—The subject of this course will be the business of international negotiation, and while necessarily parallel to international law, it will deal with that subject only as it must and in an incidental way. Lectures will be given on the origin and evolution of modern diplomacy; the qualifications and methods of typical modern diplomats; the course of certain specially noteworthy negotiations from the Congress of Vienna to the Venezuela case, including the evolution and history of the Monroe Doctrine; the organization of American and foreign diplomatic and consular services; principles of diplomatic procedure, and the duties laid down by the United States Government for its agents in foreign countries. Constructive work in the history of Europe since 1878 will be done by the students.

SOCIOLOGY AND STATISTICS.

A. *Anthropological geography*.—This considers man in relation to his physical environment, as determining his dispersal over the face of the earth, his mode of

life, and the density of population. It traces the bearings of the natural surroundings upon man's physical and mental characteristics, and follows this fundamental and necessary adjustment through the history of the family and the State and in the evolution of the forms of economic life.

B. Social statistics and applied sociology.—This course has for its foundation an inquiry into the chief results of vital statistics, such as birth and death rates, the mortality from different diseases and under varying social and climatic conditions. These data are then brought into connection with crime, pauperism, and social reform. It is the biological side of social life.

C. History, theory, and technique of statistics.—A course in statistical methods and results, with practical work in investigation and tabulation. An attempt to determine the laws that govern group actions of men. Sources and reliability of statistical data. The methods of distinguishing true and false inferences.

D. Studies in American statistics.—Critical study of the contributions of statistics to our knowledge of production, banking, coinage, prices, wages, and particularly domestic and foreign commerce.

ADMINISTRATION.

A. Municipal administration.—A series of lectures in which the development of municipal policy will be traced with regard both to the forms and the aims of municipal government. The principles determining State control and municipal home rule; the place in the municipal system of the council, the mayor and the heads of departments; comparison of the chief points in typical municipal charters, Continental, English, and American; the development of metropolitan administration in London, New York, and other great cities. The proper sphere of the municipality, first, in its traditional function as protector of person and property; secondly, in the extension of its functions to include the control of public utilities, the education of the electorate, and the care of the dependent classes; the practical workings of municipal departments in the cities of Europe and the United States with a comparison of results for different cities; the peculiar conditions which affect American municipal progress; the causes of municipal corruption, especially as found in economic conditions, and the relation between municipal reform and social reform in general.

B. Business administration. See Business Organization and Procedure, E and F.

ACCOUNTING AND AUDITING.

A. A series of lectures including a consideration of accounting as a profession.

B. Theory and practice of accounts and audit.

(a) General books, viz: Cashbook, journals, ledgers, and subsidiary books and forms.

(b) Opening, conducting and closing accounts of manufacturers, merchants, clubs, electric-light companies, street railways, dealers in investment securities.

(c) Trial balance, balance sheet, cost, depreciation, good will, profit and loss.

(d) Examinations of accounts for purposes of (1) extending credit, (2) ascertaining causes of insolvency, (3) ascertaining earnings for a series of years as a basis for capitalization and change from partnership to corporation.

(e) Various systems of accounting compared and analyzed.

(f) Auditing and arrangement of accounts with a view of facilitating an audit. This is a practice course as distinct from a lecture course.

C. Theory and practice of railroad accounting.

(a) Revenue and expenses, why railroads are operated, how organized and administered, and the relation of accounting, auditing, and statistics to operation. General plan and technique of railroad accounting.

(b) Revenue accounting, freight and ticket; how the money is collected and covered into the treasury; the safeguards provided.

(c) Disbursement accounting, stages and methods of authorization, checks provided, significance of the different certifications, possibilities of fraud.

(d) Stores and car accounting, various systems, watching balances, use of the car record in car distribution, car mileage, clearing houses, the home record, the foreign record, the interchange record.

(e) Statistics of operation, revenue disbursement, motive power, transportation, and maintenance of way. Use of statistics in handling a property.

(f) General books, ledger, side ledgers, journal, journal entries, accounts current, general balance sheet, organization and methods of the accounting office, the division and general office, the shops, the storehouse, the station agency.

BUSINESS ORGANIZATION AND PROCEDURE.

A. *Commercial law*.—An outline of the law of real property, including deeds, mortgages, and wills; of the law of contracts; of negotiable instruments; of personal property, including sales and bailments; of agency, carriers, insurance, and trustees.

B. *Industrial and commercial corporations*.—A course of lectures treating of the distinctions between natural persons, partnerships, and corporations; modes of forming corporations; inviolability of charters; powers of corporations, and their officers and agents; fiduciary relations of their officers and agents; ultra vires acts; State control over corporations; rights of stockholders; relation of stockholders to each other; issue of stocks and bonds; sales and dealing in stocks; rights of creditors; quasi-public corporations, industrial trusts.

C. *Business organization*.—A study of the methods of business organization devised for the conduct of industrial undertakings. See also Course B (a) under Transportation and Course B (b) under Money and Banking for typical instances of the organization of great undertakings.

D. *Materials and facilities*.—Detailed study of the raw products that enter into manufactures, with their sources, costs, transportation facilities, and markets. Study of the costs and processes in the stages of manufacture from the raw material to the completed product. Investigation of the times, places, and opportunities for the sale of the manufactured product.

E. *Procedure*.—A series of lectures, contrasting business conditions before and after the formation of combinations, treated under the following topics: Former business conditions, suggestions as to the causes of failure in business, unintelligent competition, industrial consolidations, economic gains and losses of consolidations, the competition of the future, commercial integrity.

F. *Relation of the employer to labor*.—This course deals with the present relations of capital and labor in the United States. It investigates the statistics, organization and methods of trades unions, their temper and tendencies, together with strikes and lockouts. It considers attempts to improve the conditions of labor, and the relations of employer and employed, such as various methods of shop management, the model factory village, profit-sharing, and cooperation. The course is based on the belief that an understanding of the workingman's point of view is essential to the successful conduct of business.

G. *Materials of construction and motors*.—(a) Materials, source, use, preparation, testing and cost of wood, lime, cement, mortar, steel, steel-concrete construction, brick and building stones. (b) Motors, characteristics, adaptation and general construction of windmills, heat, steam, and electric engines, water wheels.

H. *Commercial correspondence*.—Training in business forms, and in the problems of correspondence which involve the correct use of terms and care in construction and expression.

COMMERCE.

A. *Descriptive and commercial geography*.—This course is designed to acquaint the student with so much of geographical knowledge as is needed in modern business relations. It involves a careful study of the geographical data at the basis of commercial and economic geography, with special reference to the number and quality of the various populations. Atlases and maps are studied in detail on the practical rather than the mathematical or scientific side.

B. *International trade*.—A study of international trade routes and the facilities employed, tariff laws of the more important trading countries, commercial treaties, and a consideration of America's competitive position in the markets of the world.

C. *International commercial law*.—The course comprises such general topics in private international law as are of practical importance to persons engaging in business in or with jurisdictions other than their own, together with more specialized instruction in the commercial codes of the principal European and Asiatic nations, including the organization of companies abroad, the provisions relative to American securities on the exchanges of Paris and Berlin, trade-marks, and the method of collecting debts from foreign debtors.

D. *Materials of commerce*. (a) *Economic chemistry*.—This will treat of the place of the chemist in the world's work, the source and history of the materials in the chemical industries, the struggle for existence, the utilization of by-products, the economic value of exact knowledge.

(b) *Economic botany*.—This will aim to cover some of the most important aspects of those economic botanical problems which have a large part in practical affairs and to demonstrate the place of the botanist in the commercial world.

Sugar, coffee, wheat, forestry, and allied topics will form the basis for a consideration of the botanical and agricultural questions involved, both in this country and abroad. Some attention will also be given to the conditions, natural and artificial, necessary for the successful establishment of these industries.

(c) *Economic mineralogy*.—This will treat of the origin, distribution, identification, mining, and reduction of ores, annual output, and practical application to arts and industries. The products treated will include quarry products, carbon minerals, such as coal and petroleum, the precious metals, the useful metals, ores of the alkaline earths, and alkalis, together with glass and sand.

E. *Consular service*.—For organization and duties of the consular service, see Law and Diplomacy, D.

F. *Statistics*.—For statistics of foreign and domestic commerce, see Sociology and Statistics, D.

TRANSPORTATION.

A. *History and theory of transportation*.—The history of railroad development in the United States and foreign countries, with a study of the great railroad systems of the world. Theories of rates, combination, consolidation, community of ownership, and government ownership and control, both here and abroad, including a study of the Interstate Commerce Commission and State commissions. Water transportation, lake, river, canal, and ocean, its history and present condition, and its position as an aid to and competitor of railroads.

B. *Railroad service*. (a) *Organization*.—The organization of a railroad for business, with a discussion of the duties of officers and employees.

(b) *Operation*.—Practical methods of operation, including a careful study of the regulations governing all forms of railroad service. A study of the traffic department, including systems of car accounting. Theories of rates and methods of forming classifications and rate schedules. Fast freight lines, joint rates, and various forms of railroad associations.

(c) *Accounting and auditing*.—See Course C, under Accounting and Auditing.

(d) *Mechanics*.—Study of the elements of railroad construction and maintenance and their costs. Details of locomotives and cars, their use, construction, and repair. Modern mechanical and safety devices, including brakes, couplers, signaling systems, and the like. Purchasing department, with consideration of properties of materials and railroad supplies.

(e) *Management*.—Competition, discrimination, pooling, combination, consolidation, state ownership or control.

C. *Water transportation (inland)*. (a) *Lakes and rivers*.—The service as a competitor of railroads. Character of lake and river traffic, its organization, facilities, rates, and influences upon industry. Projects for its development.

(b) *Canals*.—Their economic value, practical use and development within the country. Careful study of the isthmian canal problem.

MONEY AND BANKING.

A. *History and theory of money and banking*.—Special attention will be devoted to the financial legislation of the United States. The practical problems before the country will be briefly considered. Modern currency standards in operation in foreign countries.

B. *Practical banking*. (a) *Law*.—Detailed study of the bank laws of the United States, and of typical States, and of generally accepted banking practice.

(b) *Organization*.—The organization of a bank for business, with the duties and liabilities of its officers and employees. Comparative study of national, State, private, and savings banks, loan and trust companies. Clearing houses, their functions and administration.

(c) *Operation*.—Practical methods of operation. Forms of credit transactions, note issues, domestic exchange. Comparative study of English and continental banks.

C. *Modern banking practice*.—A study of the question from the banker's standpoint. See Corporation Finance and Securities, C.

PUBLIC FINANCE.

A. *Public finance*.—Methods of public administration. Public expenditure and revenue. Relation of the Treasury Department to the money market in the issuance of bonds and the placing of deposits. National, State, and municipal debt and taxation. Typical States and municipalities will be carefully studied.

CORPORATION FINANCE AND SECURITIES.

A. *Corporation finance.*—Forms of investment securities, methods of corporation "financiering," consolidation, bankruptcy, receivership, reorganization, general principles of investment.

B. *Money markets and speculation.*—Movements of money and rates of domestic exchange. New York as a financial center, and the influences affecting interest rates. Note and bill brokers. Theory of foreign exchange and the causes that determine rates. Methods of international payment, movements of capital, monetary standards of foreign countries as they influence international settlements. A study of the English money market. Panics, signs of their approach, and the methods of meeting them. Detailed study of stock and produce exchanges, including a comparison of the exchanges of England and the continental countries with those of the United States.

C. *Practical study of the market.*—This subject is considered from the banker's standpoint.

(a) The money market, including interest rates, exchange, modern banking methods and practice, crises and panics.

(b) The stock market, including investments, speculation, and financial humbug.

INSURANCE.

A series of lectures designed to illustrate the practical workings of insurance as conducted to-day in all its important forms, with special reference to the United States. After a brief discussion of the economic conception of insurance, its history, development, problems, and social service, attention will be given to fire and casualty insurance, to employer's liability and corporate suretyship, but special study will be devoted to its most highly developed form in life insurance. This will involve consideration of fundamental assumptions, rate making, policy construction, varied benefits, field management, advertisements, compensation, solicitation, medical selection, practical accounting, investments, office work, corporate management, State supervision, insurance law, insurance by the State. A critical estimate will be presented of the leading theories and different practices related to these questions, the object being to give a just estimate of the business and a comprehensive knowledge of its present-day workings.

THESIS.

A thesis embodying original research and representing study in the line of work which the student is especially pursuing will be required of every candidate for the certification of the school.

The members of the faculty of the Amos Tuck School and the subjects taught by them are as follows: Rev. William J. Tucker, D. D., LL. D., president; James F. Colby, A. M., LL. B., constitutional and international law; Justin H. Smith, A. M., modern history and diplomacy; David C. Wells, A. B., geography and labor problems; Warren A. Adams, Ph. D., German composition and conversation; George R. Wicker, Ph. D., finance and statistics; Frank H. Dixon, Ph. D., transportation, finance, and business organization; Wilbur C. Abbott, B. Litt., English history; John E. Allen, A. B., LL. B., commercial and corporation law; Prescott O. Skinner, A. M., French and Spanish composition and conversation; Homer E. Keyes, B. L., commercial correspondence.

The following lecturers and instructors were appointed for the year 1901-1902: Edwin J. Bartlett, A. M., M. D., Dartmouth College, economic chemistry; Charles H. Richardson, Ph. D., Dartmouth College, economic mineralogy; Charles A. Holden, C. E., Thayer School of Civil Engineering, materials of construction and motors; George T. Moore, United States Department of Agriculture, economic botany; Robert A. Woods, A. B., head of the South End House, Boston, Mass., municipal administration; Joseph A. De Boer, A. M., actuary of the National Life Insurance Company, theory and practice of life insurance; Marshall P. Thompson, A. B., LL. B., lawyer, Boston, Mass., international commercial law; J. Shirley Eaton, A. M., statistician of the Lehigh Valley Railroad Company, theory and practice of railroad accounting; Alfred L. Ripley, A. M., vice-president of the National Hide and Leather Bank, Boston, Mass., stock and money markets;

James Logan, general manager of the United States Envelope Company, Worcester, Mass., business methods; Gerald Wyman, A. M., professional accountant, Boston, Mass., accounts and accounting; Edward P. Comins, public accountant, Boston, Mass., accounting and auditing.

NEW YORK UNIVERSITY, NEW YORK CITY.

The School of Commerce, Accounts, and Finance was established in October, 1900, "to train men for the higher duties of commercial life." The course of study extends through two years, and leads to the degree of Bachelor of Commercial Science. The following outline of the subjects embraced in the curriculum is announced, subject to changes:

A. ACCOUNTING.

1. *Theory of accounts.*—Principles of accounting, purpose of accounts; single and double entry; the different books of accounts.

2. *Practice in accounting.*—Description and illustration of accounts of individuals; accounts of partners; accounts of corporations—commercial, financial, manufacturing, transportation, etc.; municipal accounts; State accounts; Federal accounts; receivership; trusteeship; executorship; liquidation, etc.; statement of affairs.

3. *Auditing.*—Methods of procedure in examination of accounts of individuals, partners, corporations, municipalities, etc.; verification of balance sheets and statements of profit and loss; special reports.

B. COMMERCE.

1. *Foreign commercial relations.*—Theory of international trade; history and development of commerce during the last two centuries; trade policies of foreign governments toward one another and toward colonial dependencies; foreign commerce of the United States; commercial treaties of United States with the countries of Europe; economic aspects of colonial development; foreign trade of America as affected by recent acquisitions of territory; commercial possibilities of the Orient and South America; consular service and regulations as affecting commerce; economic and commercial geography.

2. *Domestic commerce and transportation.*—History of transportation and of railway policies; economic and social bearings of present transportation problems; railway construction, speculative management, stocks and bonds; railway failures, receiverships, reorganizations, negotiations, profits; theories of rates, classification, discrimination, competition, combination-railway; employers' liabilities, labor relief, insurance, State ownership and management; comparative study of interests of inventors, of employees, of public, of State.

C. FINANCE.

1. *Money.*—Theory and history of money; functions of money as a medium of exchange and denominator of value; relation of prices to prosperity; Government paper money and fiat money; bimetalism v. monometallism; monetary experiences and legislation of the United States; the law of March 14, 1900.

2. *Credit and banking.*—Theory of credit and its relation to prices; history and theory of banking; development and functions of deposit banks; nature and services of the bank note; banking systems of Europe; national banking system and proposed reforms.

3. *Money market.*—Influences governing the rate of interest and prices of securities; relation of the money market to the United States Treasury; rules and practices of the New York Stock Exchange; produce exchanges and deals in futures; panics and commercial crises; theory of foreign exchange; payment between countries having different standards; international movements of gold and securities; arbitrage operations.

4. *Public finance.*—Revenues and expenditures of the various political units in America (local, State, national); chief features of public financial administration; history of financial development (Federal, State, and municipal); recent problems of State taxation.

D. COMMERCIAL LAW.

First year.—Elementary law (one hour per week); contracts (one hour per week).

Second year.—Commercial paper (one hour per week); corporations.

E. ADMINISTRATION.

1. General principles of business organization and management.
2. Administration of public business.
3. Ethics.

The faculty of the school consists of the following members: Henry M. MacCracken, D. D., LL. D., chancellor; Charles Waldo Haskins, C. P. A., dean and professor of auditing and of the history of accounting; Joseph French Johnson, A. B., secretary and professor of political economy; Charles E. Sprague, A. M., Ph. D., C. P. A., professor of the theory of accounts; Anson O. Kittredge, C. P. A., professor of theory of accounts and practical auditing; Ferdinand William Lafrentz, C. P. A., professor of auditing; Joseph Hardcastle, C. P. A., lecturer on accounts of trustees and executors; J. Shirley Eaton, A. M., lecturer on domestic commerce and transportation; William Clarence Webster, Ph. D., lecturer on theory, history, and geography of commerce; Cleveland F. Bacon, A. B., LL. B., lecturer on law (elementary law and contracts); William F. Walsh, A. B., LL. B., lecturer on law (commercial paper and corporations); Leslie J. Tompkins, M. S., LL. M., registrar; Clarence N. Jones, A. M., lecturer on life insurance; Morris Putnam Stevens, LL. B., lecturer on law.

OHIO STATE UNIVERSITY, COLUMBUS, OHIO.

The course in commerce and administration extends through four years and leads to the degree of Bachelor of Philosophy. The studies included in the course are as follows:

First year.—French, German, European history, algebra, trigonometry, analytics, calculus, rhetoric.

Second year.—French or German, United States history, elementary economics, history of England, rhetoric, English literature, and one of the following: Botany, general chemistry, physics, zoology.

Third year.—Elementary law (or commercial law and private and municipal corporations), philosophy, contracts, or any two of the following: Private corporations, insurance, agency, sales, and mortgages. Electives: Economics, German, history, political science, rhetoric, romance languages. Four hours per week are devoted to the major subject elected by the student.

Fourth year.—Five hours per week are devoted to the major subject and ten hours to studies chosen from the electives enumerated under third year.

CENTRAL HIGH SCHOOL, PHILADELPHIA, PA.

The department of commerce was inaugurated in September, 1898. It has a four years' course of study leading to the degree of Bachelor of Science, as follows:

FRESHMAN YEAR.

English.—Composition writing, with a study of classical literature in translation and of American literature, 4 hours.

Latin.—Elements of Latin and easy readings, 4 hours.

Mathematics.—Algebra, 5 hours.

History.—Greek and Roman history and European history to 800 A. D., 3 hours.

Science.—Raw materials of commerce (animal, vegetable, and mineral products), 4 hours.

Economics.—Philadelphia history, government, and business interests (lectures and quizzes), 2 hours.

Business technique.—Business forms, with penmanship. Practice, 2 hours.

SOPHOMORE YEAR.

English.—History of English literature, with composition writing, 3 hours.

German.—Grammar, reading, and conversation, 5 hours.

Mathematics.—Advanced commercial arithmetic, including mensuration and the metric system, 2 hours. Elements of geometry and trigonometry, 3 hours.

History.—English and modern European history, 3 hours.

Science and economics.—Commercial geography, 2 hours. Trade centers of the world—lectures in connection with the course on commercial geography, 1 hour.

Business technique.—Bookkeeping, 3 hours. Stenography, 2 hours. Typewriting (optional).

JUNIOR YEAR.

English.—Readings from English literature, with essay writing, 2 hours.

German.—Reading, composition, and conversation, 3 hours.

Romance languages.—Spanish or French, 4 hours.

History.—American history, 2 hours.

Science.—Physics and chemistry, 4 hours.

Economics.—Political economy, 2 hours.

Business technique.—Mechanical drawing, 2 hours. Observation of and report on office practice, business methods, etc., 3 hours. Stenography, 2 hours. Typewriting (optional).

SENIOR YEAR.

English.—Readings from literature and thesis writing, 3 hours.

German.—Advanced reading, conversation, and correspondence, 3 hours.

Romance languages.—Spanish or French, 3 hours.

History.—Modern industrial and commercial history (of the United States and England), 3 hours.

Science.—Industrial chemistry, 2 hours.

Economics and political science.—Transportation, banking and finance, 4 hours. Statistics (in connection with thesis writing), 1 hour. Study of government (chiefly of cities), 3 hours.

Business technique.—Ethics of business and commercial law, 2 hours.

DREXEL INSTITUTE, PHILADELPHIA, PA.

The department of commerce and finance offers a liberal and thoroughly practical course of study, including two years' training in a knowledge of the world's industries and markets, the laws of trade and finance, and the mechanism and customs of business. Besides the systematic course of two years, there are three distinct office courses, each occupying one year and leading to a specific line of employment. A course is offered for teachers who wish to fit themselves for commercial high-school work.

Applicants for admission to any of the courses, except the commercial course for teachers, must pass satisfactory examinations in English grammar and composition, geography, arithmetic, and United States history, and must be at least 16 years of age. The diploma of high schools of approved standing is accepted in place of an examination.

I. COURSE IN COMMERCE AND FINANCE.

The aim of the course in commerce and finance is to give young men and young women thorough fundamental training for the activities of business, which include: (1) The production, manufacture, sale, and transportation of articles of commerce; (2) the management of stock companies and corporations; (3) the buying and selling of securities; (4) the importing and exporting of merchandise; (5) the borrowing and lending of money and credit; (6) the advertising of commercial concerns; (7) the keeping of business records; (8) a knowledge of the Spanish language.

The work of the course is divided into two years, as follows:

JUNIOR YEAR.

First term.

English language.—Composition; letter-writing. American classics.

Commercial arithmetic.—Weights and measures; metric system; trade standards and prices; wages and pay rolls; commercial interest and discount; speed practice.

Business customs.—Invoices; commercial paper; bills of lading and manifests; vouchers.

Bookkeeping.—Principles and practice of single and double entry; simple transactions; business forms.

Penmanship.—A plain, rapid business hand.

Typewriting.—Word exercises; study of mechanism of machine; transcribing from rough draft.

Correspondence.—Mechanical arrangement and style of business letter; exercises in condensing and expanding.

Commercial geography.—Physical and mathematical geography in their relations to commerce. Commercial geography of the United States.

Spanish language.—Elementary grammar, oral and written exercises; vocabulary.

Second term.

English language.—Grammatical principles; diction. Selected classics.

Industrial arithmetic.—Measurements; builders' and contractors' bids and estimates; scientific measurements; manufacturers' and mechanics' estimates; metric system.

Business customs.—Securities; collections; discounts.

Bookkeeping.—Principles and practice of single and double entry in more complicated transactions. Shipments, consignments, and business forms.

Commercial calculations.—Practical exercises for acquiring rapidity and accuracy of work.

Commercial geography.—Industrial and economic geography of the United States, special attention being given to the new dependencies. Study of the world's commercial staples, raw and manufactured.

Spanish language.—Grammar, oral and written exercises, vocabulary, reading; business letters and business forms.

Penmanship.—Continued.

Typewriting.—Continued.

Correspondence.—Letters relating to contracts, purchases and sales, recommendations, introduction, credit; circulars, telegrams.

Public speaking.—One hour a week throughout the year.

Physical training in the gymnasium twice a week throughout the year.

SENIOR YEAR.

First term.

English language.—Rhetorical principles; synonyms; essay writing.

Advanced bookkeeping.—Importing and jobbing; wholesale and retail; manufacturing, real estate, joint stock companies, corporations, banking, etc. Introducing order book, cashbook, invoice and sales register, special column journal, bill book.

Banking and finance.—Outlines of the history of banking and of the national banking system, State banks, savings banks, trust and financial companies; foreign banking; banking in its relations to foreign trade.

Commercial arithmetic.—Financial problems involving partial payments; buying and selling exchanges; stocks and bonds; equating of accounts; adjusting of partnership, joint stock company, and corporation accounts.

Commercial geography.—A comparative study of the commerce and industry of the great commercial nations of the world.

History of commerce.—Outlines of the history of ancient, mediæval, and modern commerce, with special reference to the history of American commerce.

Civics.—Principles and practical operation of government in the United States.

Spanish language.—Grammar, conversation, reading, correspondence.

Typewriting.—Arrangement of papers.

Second term.

English language.—Paragraph—its sum and structure. Study of selected plays of Shakespeare.

Advanced bookkeeping.—Continued.

Commercial arithmetic.—Continued.

Banking and finance.—Bank management, mechanism and practice of banking; the clearing house; currency reform.

Commercial geography.—Continued. Special studies requiring independent research.

Mechanism of commerce.—Boards of trade; stock and produce exchanges; trans-

portation; interstate commerce; warehousing; importing and exporting; duties; exchange; mercantile agencies.

Commercial law.—Elementary principles of contracts and negotiable paper, and the leading principles which regulate the relations of the business man—principal and agent; carriers; commission merchants; partnerships; joint stock companies; corporations.

Civics.—Principles and practical operation of government in the United States; history, principles, and organization of political parties; civil service; ballot systems; representation systems; municipal government.

Business printing and advertising.—Type and paper; printers' estimates; proof-reading; business cards, circulars, and catalogues. Modern advertising, including mediums, rates, agencies.

Spanish language.—Reading, conversation, correspondence.

Public speaking.—One hour a week throughout the year.

Physical training in the gymnasium twice a week throughout the year.

There are evening classes in the Spanish, French, and German languages, to which students of the department may be admitted on the payment of a fee of \$6 for each language.

Students may elect to do special work in chemistry at the discretion of the director in charge.

The stereopticon is freely used in the class room as an aid in teaching the history and mechanism of commerce, commercial geography, and other subjects.

During the senior year visits are made to some of the leading industrial and commercial establishments of Philadelphia, and systematic use is made of the Philadelphia commercial museums in the study of commercial geography.

Table showing the distribution of time for the several subjects of instruction.

JUNIOR YEAR.

Subject.	Hours per week.
English language	2
Commercial and industrial arithmetic	4
Business customs	1
Bookkeeping	5
Penmanship	2
Typewriting	2
Correspondence	1
Commercial geography	2
Spanish language	2
Public speaking	1
Physical training	2
Total	24

SENIOR YEAR.

Subject.	Hours per week.	
	First term.	Second term.
English language	2	2
Bookkeeping	3	3
Banking and finance	1	1
Commercial arithmetic	3	3
Commercial geography	2	2
History of commerce	2	2
Mechanism of commerce	2	2
Civics	2	2
Spanish language	2	2
Commercial law	2	2
Business printing and advertising	2	1 ¹
Typewriting	2	2
Public speaking	1	1
Physical training	2	2
Total	22	23

¹ Part of the term.

The diploma of the institute is granted to students who complete the course in commerce and finance and pass the prescribed examinations.

II. COMMERCIAL COURSE FOR TEACHERS.

In order to meet the growing demand for specially trained commercial teachers, the institute offers instruction to men and women who wish to equip themselves for entrance upon the new and widening field of commercial work in high schools and academies.

For admission to this course, the applicant must have had at least two years' experience in general teaching, or must have been graduated from a State normal school of approved standing.

Students who enter this course are given special consideration by the professors and instructors of the department, generous assistance being given in methods of teaching, the preparation of outlines and courses, and the bibliography of the several subjects.

The course occupies one year, divided into two terms, and includes the following subjects:

English language.—Rhetorical principles; essay writing; selected plays of Shakespeare.

Bookkeeping.—Principles and practice of single and double entry; business forms; importing and jobbing; wholesale and retail; manufacturing, real estate, joint stock companies; corporations; banking, etc. Introducing order book, cash book, invoice, and sales register, special column journal, bill book.

Commercial arithmetic.—Financial problems involving partial payments; buying and selling exchanges; stocks and bonds; equating of accounts; adjusting of partnership, joint stock company, and corporation accounts.

Banking and finance.—Outlines of the history of banking and of the national banking system; State banks, savings banks, trust and financial companies; foreign banking; banking in its relations to foreign trade; bank management, mechanism, and practice of banking; the clearing house; currency reform.

Commercial geography.—Physical and mathematical geography in their relations to commerce; industrial, commercial, and economic geography of the United States; comparative study of the commerce and industry of the great commercial nations of the world; special studies requiring independent research.

History of commerce.—Outlines of the history of ancient, mediæval, and modern commerce, with special reference to the history of American commerce.

Commercial law.—Elementary principles of contracts and negotiable paper, and the leading principles which regulate the relations of the business man—principal and agent; carriers; commission merchants; partnerships; joint stock companies; corporations.

Mechanism of commerce.—Boards of trade; stock and produce exchanges; transportation; interstate commerce; warehousing; importing and exporting; duties; exchange; mercantile agencies.

Civics.—Principles and practical operation of government in the United States; history, principles, and organization of political parties; civil service; ballot systems; representation system; municipal government.

Stenography.—Theory of Pitman system; special emphasis upon methods of teaching the subject.

Typewriting.—Word exercises; study of leading typewriters; transcribing from rough draft; arrangement of papers; instruction in duplicating processes; letter press; office practice.

Penmanship.—A plain, rapid business hand.

Should the student's time admit, the Spanish language may be added to the course.

Table of the distribution of time for the several subjects of instruction.

Subject.	Hours per week.	
	First term.	Second term.
Bookkeeping	3	3
Commercial arithmetic	3	3
Commercial geography	3	3
History of commerce	2	0
Banking and finance	1	1
English language	2	2
Civics	2	2
Stenography	3	3
Typewriting	3	1
Commercial law	0	2
Mechanism of commerce	0	2
Penmanship	1	1
Total	23	23

The diploma of the institute is granted to students who complete the commercial course for teachers and prepare an acceptable thesis upon an assigned commercial topic.

III. OFFICE COURSES.

Three distinct office courses are offered. These are thoroughly practical in character, and are adapted to prepare young men and young women for entering immediately upon the respective lines of employment to which the training leads.

Private secretary course.—This course has been organized to respond to applications that are made to the institute for clerks fitted to do work of a more general character and of a higher grade than that required in a purely business office. Applicants for admission must show by examination, or otherwise, that they are prepared to profit by the training given in this course.

The course occupies one year, divided into two terms, and includes the following subjects:

Stenography.—First term: Theory of Pitman System; daily drill in phonetics. Second term: Practice of the art by means of carefully graded dictation exercises, and daily transcript of notes.

Typewriting.—Word exercises; study of leading typewriters; transcribing from rough draft; arrangement of papers; instruction in duplicating processes; letter press; office practice.

English language.—Rhetorical principles; essay writing; collection and arrangement of material; criticism of manuscript; English classics.

Spanish language.—Grammar, oral and written exercises; reading, correspondence, business letters and business forms.

Business printing.—Type and paper; printers' estimates; proof-reading.

Accounts, business forms and customs.—Elements of single and double entry bookkeeping; invoices, commercial paper, vouchers, etc.

Correspondence.—Arrangement and style of business letters; letters of recommendation, introduction, etc.; circulars, telegrams.

Penmanship.

Public speaking.—One hour a week, for young men.

Physical training in the gymnasium, twice a week.

Table of the distribution of time for the several subjects of instruction.

Subject.	Hours per week.
Stenography	9
Typewriting	5
English language	2
Spanish language	2
Accounts, business forms and customs	1
Correspondence	1
Penmanship	1
Business printing	11
Physical training	2
Total	24

¹ Part of second term.

Bookkeeping course.—The object of this course is to prepare young men and young women for positions as bookkeepers. It occupies one year, divided into two terms, and includes the following subjects:

Bookkeeping.—Single and double entry; use of auxiliary books; order books, cashbooks, invoice and sales register, bill book, special-column journal, etc.

Commercial arithmetic.—Weights, measures; metric system; builders', manufacturers', mechanics' estimates; partial payments; exchanges, stocks, bonds, partnerships; joint-stock companies and corporations; speed practice.

Business forms and customs.—Invoices, commercial paper, bills of lading, and manifests; vouchers.

English language.—Composition; letter writing; grammatical principles. American classics.

Correspondence.—Arrangement and style of business letters; letters of recommendation, introduction, etc.; circulars, telegrams.

Penmanship.—A plain, rapid business hand.

Typewriting.—Word exercise; mechanism of machine; transcribing from rough drafts; arrangement of papers.

Public speaking.—One hour a week, for young men.

Physical training.—In the gymnasium, twice a week.

Table of the distribution of time for the several subjects of instruction.

Subject.	Hours per week.
Bookkeeping	8
Commercial arithmetic	5
Business forms and customs	1
English language	2
Correspondence	1
Penmanship	2
Typewriting	3
Public speaking	1
Physical training	2
Total	25

Stenography course.—The aim of this course is to train young men and young women for positions as stenographers. There is a growing demand among business men for stenographers who can not only take down and typewrite correspondence, but who have a serviceable knowledge of good English and who are intelligently trained along general educational lines.

The course occupies one year, divided into two terms, and includes the following subjects:

Stenography.—First term: Theory of Pitman System; daily drill in phonetics. Second term: Practice of the art by means of carefully graded dictation exercises and daily transcript of notes.

Typewriting.—Word exercises; study of leading typewriters; transcribing from rough draft; arrangement of papers. Instruction in duplicating processes; letter-press; office practice.

English language.—Composition; letter-writing; grammatical principles. Selected American or English poets.

Accounts, business forms, and customs.—Elements of single and double entry bookkeeping; invoices, commercial paper, vouchers, etc.

Correspondence.—Practice in writing business letters, orders, and telegrams.

Penmanship.

Public speaking.—One hour a week, for young men.

Physical training.—In the gymnasium, twice a week.

Table of the distribution of time for the several subjects of instruction.

Subject.	Hours per week.
Stenography	9
Typewriting	5
English	2
Accounts, business forms, and customs	1
Correspondence	1
Penmanship	1
Physical training	2
Total	21

Certificates are granted to students who complete any one of the office courses and pass the prescribed examinations.

COMMERCIAL MUSEUM.

A beginning was made in 1895 toward the formation of a permanent commercial museum, and a large collection of raw and manufactured products has already been secured. The collection represents quite fully the following industrial products: Flour, wool, petroleum, teas and coffees, sugar, cotton, copper, iron and steel, glass, tobacco, leather, rubber, paper, wood, carpet, linen, spices, aluminum, building stone, brick and terra cotta. Additions are constantly being made, and the student who is looking forward to devoting his life to trade, shipping, or manufacturing, has opportunity, in connection with his academic work, to make a special study, from both a geographic and an economic standpoint, of the particular industry in which he is interested.

The instructors in the department of commerce and finance are as follows: Parke Schoch, A. M., director, professor of the history and mechanism of commerce, and stenography; Jonathan J. Sparling, professor of the theory and practice of accounts; Carl L. Altmaier, professor of commercial law and instructor in correspondence and typewriting; John T. Holdsworth, professor of commercial geography and banking; Harriet L. Mason, professor of English language and literature; Calixto Guitéras, C. E., professor of Spanish; Carolyn H. Locke, instructor in stenography; Alice E. Chase, A. B., instructor in English; Lillian M. Dalton, instructor in English.

UNIVERSITY OF PENNSYLVANIA, PHILADELPHIA, PA.

The Wharton School of Finance and Economy was founded in 1881 by Joseph Wharton, esq., of Philadelphia, who expressed the desire that it should offer facilities for obtaining (1) "An adequate education in the principles underlying successful civil government." (2) "A training suitable for those who intend to engage in business or to undertake the management of property." The regular course of study extends through four years, leads to the degree of Bachelor of Science, and is as follows:

FRESHMAN CLASS.

Subjects.	Hours a week.	
	First term.	Second term.
Political economy.....	2	2
Constitutional law.....	2	2
Physiography.....	2	2
Accounting.....	2	2
American history.....	2	2
English composition.....	2	2
English language.....	1	1
German ¹	3	3
French ¹		

SOPHOMORE CLASS.

Political economy.....	2	2
Geography of commerce ²	2	2
Economic geography ²	2	2
Railway finance ²	2	2
Money, credit, and foreign exchange ²	2	2
European history ²	2	2
Modern legislative problems.....	2	2
Modern novelists.....	3	3
Modern essayists.....		
German ¹	3	3
French ¹		
Chemistry ¹	2	2
Mathematics ¹	2	2
Public speaking ³	1	1

¹One only required.²Elective courses from which seven hours must be chosen.³Optional.

JUNIOR CLASS.

Subjects. ¹	Hours a week.	
	First term.	Second term.
Political economy	2	2
Sociology	2	2
Government and State activity	2	2
American history	2	2
English constitutional history	2	2
English industrial development	2	2
Elementary common law	2	2
Roman law	2	4
Charities and correction	2	2
American commerce and commercial relations	2	2
Industrial management	2	2
History of banking in Europe	2	2
History of banking in the United States	2	2
Economic geography of America	2	2
Public administration	2	2
English literature	2	2
Logic	2	2
Ethics	2	2

SENIOR CLASS.

Public finance	2	2
American history	2	2
Development of English civilization	2	2
English legal institutions	2	2
Court decisions on the Federal Constitution	2	2
Colonies and dependencies	2	2
Private finance	2	2
Social reformers	2	2
International law	2	2
Local and municipal institutions	2	2
European commerce and commercial relations	2	2
The Renaissance and Reformation	2	2
Transportation	2	2
Financiering of trusts and corporations	2	2

¹ From which each student must choose sixteen hours in each term.

The instruction offered in some of the technical subjects is as follows:

GEOGRAPHY AND COMMERCE.

American commerce and commercial relations.—The history of American commerce. An analytical study of the present trade of the United States with different sections of the world, and an investigation of the commercial treaties in force between the United States and the leading foreign nations. The latter part of the course deals with commercial policy. Lectures, assigned readings, and reports. Elective for juniors and seniors in finance and economy. Two hours.

European commerce and commercial relations.—A history of European commerce. An analytical study of the present commerce of Great Britain, France, Germany, and Russia. A study of the commercial policy and commercial relations of European countries with special reference to their relation to American commerce. Elective for seniors in finance and economy. Two hours.

Transportation.—A study of the American railway system, the several branches of the railway service, and the questions of public aid and public control. A study of inland navigation and ocean shipping, with special reference to the United States. Lectures, assigned readings, and reports. Elective for seniors in finance and economy. Two hours.

Geography of commerce.—A study of the economic and commercial geography of the United States, and of the organization and routes of our international trade. The leading industries of the different sections of the country are considered, and a study is made of the foreign trade to which those industries give rise. Lectures, assigned readings, and reports. Elective for sophomores in finance and economy, and required of second-year specials in banking. Two hours.

Physiography.—(a) *Land sculpture:* A treatment of the forces and laws of land sculpture, with special application of the United States. (b) *The principles of*

meteorology: The charting of weather elements and interpretation of weather maps. Lectures, readings, and map construction. Freshmen in finance and economy, and first-year specials in banking. Two hours.

Economic geography of America.—The geologic structure of America, with results in topography and soils. The distribution of heat and moisture resulting in forests, farms, and grazing lands. Distribution of minerals and of soils, and of plant and animal life, determining the settlement and industrial development of the country. Facilities for transportation and communication; harbors, common roads, railways, and canals. The location of great trade centers. Action and reaction between man and his environment. Elective for juniors and seniors in finance and economy, and second-year specials in banking. Two hours.

BUSINESS PRACTICE.

Bookkeeping and office methods.—Theoretical and practical bookkeeping; practice employed in different forms of business, mercantile, manufacturing, and banking. Lectures and bookkeeping practice. Three hours (first term).

Corporation accounting.—Lectures on the elements of corporation accounting, supplemented by the examination of the accounts of railway and industrial corporations. Three hours (second term).

Industrial management.—The organization and management of industry and trade. A study of the practice of business. Lectures, assigned readings, and reports. Elective for juniors and seniors in finance and economy, and required for second-year specials in banking. Two hours.

Business law and contracts.—Post seniors in civil and mechanical engineering, seniors in the four-year engineering courses, and in chemistry. Sophomores in finance and economy, and second-year specials in banking. One hour.

Banking practice.—The practice of banking in the United States; forms and methods; duties of officers and employees; organization of banks, functions and machinery of the clearing house, etc. Bolles's Practical Banking. First-year specials in banking. Two hours (first term).

FINANCE.

Public finance.—A course on public revenue and public expenditures, with special reference to the financial systems of the United States, of Pennsylvania, and of Philadelphia. Adams's Public Debts. Seniors in finance and economy, and in arts and science in the economics, social science, and law group, and second-year specials in banking. Two hours.

Money, credit, and foreign exchange.—The phenomena of the money market in their relation to trade, industry, and speculation. The principles regulating the flow of gold and currency in domestic and international settlement. The machinery of the domestic and foreign exchanges. Goschen's Foreign Exchange. Clare's A B C of Foreign Exchange. Sophomores in finance and economy, and second-year specials in banking. Two hours.

Principles of private finance.—The acquisition and expenditure of private funds. What forms of money and credit may be used as funds; the instruments used in procuring funds; the institutions and agents employed in funding operations; settlements made between funding agents. Lectures, special assignments, and class discussion. Seniors in finance and economy and second-year specials in banking (first term).

The financiering of trusts and industrial corporations.—A study of the financial methods peculiar to the industrial corporation and of the special advantages of the several financial methods that may be properly employed. Special attention is given to the methods employed in the financiering of trusts. Lectures, assignments, and class discussion. Elective for seniors in finance and economy and second-year specials in banking. Two hours.

History of banking in Europe.—After a general survey of the money and credit systems among the ancients and in the middle ages the course takes up the great European systems. Beginning with the history of banking in Italy, this is followed by that of the Bank of Amsterdam, banking in England. France, Austria-Hungary, Germany, Russia, and the Scotch system; Conant's History of Modern Banks of Issue; lectures and assignments; juniors in finance and economy, and second-year specials in banking. (First term.)

History of banking in the United States.—This course first takes up the banking experience during colonial days. In the subsequent development special stress is thrown on the history of "The first and second Banks of the United States," "The New England banking system," "The safety-fund system," the "Free-

banking system," the "National banking system," and present tendencies in banking. Knox's History of Banking; Report of Monetary Commission; lectures and assignments. Juniors in finance and economy, and second-year bankers. (Second term.)

Investment and speculation.—The nature, methods, and law of investment, and of the relation of speculation to investment. The relative merits of railway stocks, bonds, farm mortgages, street railways, gas and water securities, municipal and county bonds, etc., as investments receive special attention. Lectures, assignments, and class discussion. First-year specials in banking, and elective for sophomores in finance and economy. Two hours (second term.)

Railway finance.—A study of the financial operations in promotion, construction, operation, and consolidation of railway companies, including bankruptcy, receiverships, and reorganization. Lectures. Poor's Manual and Commercial and Financial Chronicle. Elective for sophomores in finance and economy and for first-year specials in banking. Two hours (first term)

The faculty of the Wharton School is as follows: Charles C. Harrison, LL. D., provost; Edgar F. Smith, Ph. D., Sc. D., vice-provost; Josiah H. Penniman, Ph. D., dean; Simon N. Patten, Ph. D., professor of political economy; John Bach McMaster, A. M., Litt. D., professor of American history; Edward P. Cheyney, A. M., professor of European history; Emory R. Johnson, Ph. D., assistant professor of transportation and commerce; Samuel M. Lindsay,¹ Ph. D., assistant professor of sociology; Leo S. Rowe, Ph. D., assistant professor of political science; Henry R. Seager, Ph. D., assistant professor of political economy; James T. Young, Ph. D., instructor in administration; Albert S. Bolles, Ph. D., LL. D., lecturer on banking law and practice; William E. Lingelbach, Ph. D., instructor in European history; Frederick A. Cleveland, Ph. D., instructor in finance; Edward S. Meade, Ph. D., instructor in business practice; J. Paul Goode, Ph. D., instructor in geography; George W. Scott, A. B., assistant in public law.

UNIVERSITY OF SOUTH DAKOTA, VERMILION, S. DAK.

The College of Commerce offers a course of study extending through two years and leading to the degree of Bachelor of Commerce. Admission to the course is granted to persons who have completed the preparatory course, substituting shorthand, bookkeeping, and typewriting for foreign languages.

The course of study is as follows:

Junior year.—Commercial law and legislation; commercial arithmetic; English; political economy; commercial geography; transportation.

Senior year.—Banking; insurance; economic history; finance; corporations; parliamentary law; one elective.

The instruction offered in some of the commercial branches is as follows:

Commercial and industrial geography.—Natural products of the world, by countries; methods for preparing these products for the market; manufactured articles, where and how made; where raw materials are obtained; what are or may be markets for these products or materials; comparative study of great commercial centers and nations; business methods in foreign countries; prices, tariffs, means of communication, etc.

Transportation.—Development and present status of railroads, canals, steamboats, and steamship lines; their relation to individual shippers and to industry and commerce.

Commercial law.—Elements of law, the feudal system and customs of ancient traders; contracts, negotiable papers, agency, partnership, guaranty, lien, usury, etc.

Commercial legislation.—Commercial legislation passed by Congress and other legislative bodies; commercial treaties; State legislation, Western States, especially South Dakota.

¹ Appointed commissioner of education of Porto Rico.

Banking.—History of banking; national, State, savings, and private banks; trust, investment, and mortgage companies; foreign banking systems; bank papers and records; clearing houses; analysis of proposed banking reforms.

Insurance.—Life, fire, and marine insurance; nature of policies issued under each system; examination of insurance contracts and of insurance companies' reports.

Corporations.—Purpose and organization of corporations, trusts, and monopolies; charters, powers, rights, and duties of each; effect on commerce, benefits and injuries; proposed legislation; method of keeping records and distributing funds.

UNIVERSITY OF THE SOUTH, SEWANEE, TENN.

The course in finance and economy is designed to cover a period of two years. Instruction is given in the following branches: Bookkeeping, banking, commercial law, finance, political economy, history, English, commercial arithmetic, typewriting, stenography, and telegraphy.

AGRICULTURAL COLLEGE OF UTAH, LOGAN, UTAH.

This institution offers two commercial courses; a four-year course leading to the degree of Bachelor of Science, and a short course of two years.

The subjects included in the four-year course are as follows:

Freshman.—Grammar, rhetoric, literature, algebra, geometry, history, physics, drawing, shopwork.

Sophomore.—Chemistry, rhetoric, solid geometry and higher algebra, trigonometry, analytical geometry, civil government and constitutional law, anatomy and physiology, surveying.

Junior.—Heat and electricity, or stenography, agricultural chemistry or stenography, German, calculus, botany, psychology, zoology, history of commerce, science of accounts, physics, bookkeeping.

Senior.—Physiological botany, commercial law, German, geology, literature, commercial calculations, political economy, stenography or business practice, stenography or business customs, stenography or auditing and experting of accounts, typewriting.

The short course of two years includes all of the commercial branches assigned to the four-year course, but contains much less of general culture studies.

The instruction given in some of the commercial branches is as follows:

Business customs.—The fundamental principles of bookkeeping are applied according to modern ideas of business. The subjects of banking, securities, exporting and importing, railroading, business correspondence, and everyday business transactions are carefully examined from a practical standpoint.

History of commerce.—Careful study of the principal countries of the world from which such staple articles of commerce as food, textile and mineral substances, metals and manufactured products are obtained. The student notes the kinds and amount of such products from those countries, and the dependence of each upon every other for the necessities and luxuries of life; he learns how markets are created and controlled; how waterways and railways afford a ready means of transportation and influence; and how the improved mail, postal, telephone, and telegraph services facilitate the interchange of thought and also influence trade. Statistics are gathered showing the magnitude of the world's production. Practical commercial problems of the day are discussed.

Political economy.—The economic laws of trade, the general principles of political economy technically applied to commerce, and general business methods are carefully examined.

Commercial law.—Customs and the law of the nature, formation, operation, interpretation, and discharge of contracts, including agency, partnership, corpo-

ration, bills, notes and checks, purchase and sale of personal property, guaranty or suretyship, limitation of the time to sue, commission merchants and brokers, agreements for personal services, bailments, insurance, telegraphic communication, patents, copyright, trade marks, real-estate conveyances, and the business and legal forms that are used to carry on trade.

UNIVERSITY OF VERMONT, BURLINGTON, VT

The course of study in commerce and economics extends through four years and leads to a baccalaureate degree. The freshman and sophomore years are the same as those of the general culture courses of the university. The junior and senior years are as follows, the students being expected to take sixteen hours per week:

Junior year.—Required: Economics, 3; modern languages, 3; English, 1; American civil institutions, 3; accounting, 3. Elective: History, 3; logic, 3; mathematics, 3; physics, 4; sociology, 3.

Senior year.—Required: Economics, 3; constitutional law and comparative politics, 2; international law, 2; money, banking, and international trade, 3. Elective: History, 3; sociology, 3; commercial law, 2; modern languages, 3; English, 2.

UNIVERSITY OF VIRGINIA, CHARLOTTESVILLE, VA.

This institution offers a course of study extending through three years for young men who desire to be prepared to enter the consular service of the United States. The course does not lead to a degree, but a certificate of proficiency is given on the completion thereof. The course is as follows:

1. French, German, Spanish, Italian.
2. Modern history, economics, general and industrial chemistry.
3. Constitutional and international law, contracts, criminal law, persons and wills, conflict of laws.

Under the general subject of economics are studied the general principles of economic science (Walker), money and banking (White), public finance (Plehn), protective tariffs (Sherman), monopolies and trusts (Ely).

WASHINGTON AGRICULTURAL COLLEGE, PULLMAN, WASH.

The course of study of the School of Business extends through two years and includes the subjects of penmanship, commercial geography, banking, commercial arithmetic, grammar and composition, rhetoric, typewriting, stenography, algebra, general history, commercial law, economics and industrial history, orthography and punctuation, and French, German, or Spanish.

WEST VIRGINIA UNIVERSITY, MORGANTOWN, W. VA.

The commercial school was established in 1895. The course of study extends through two years and includes instruction in chemistry, English, commercial geography, economics, botany, freehand drawing, bookkeeping, commercial law, bank accounting, shorthand, typewriting, history of commerce, physics, and geology.

The instruction in commercial law, commercial geography, and history of commerce is as follows:

Commercial law.—Contracts, negotiable paper, bailments and suretyships, agency.

Commercial geography.—A description of the surface of the earth, with special reference to the production, manufacture, transportation, and exchange of articles of trade. A general outline of the countries of the world, soil, climate, agricultural products, forests, manufactories, quarries, mines, centers of industry, foreign relations, ways of communication, social relations and conditions, imports, exports, and markets. Special attention is given to the study of the United States, area, climate, position, population, natural resources, raw products, man-

ufactures, waterways, railways, seaports, exports, imports, reason for rapid growth of Western cities, industrial possibilities.

History of commerce.—History of commerce; methods of exchange in ancient times; shipping of the ancients; fairs and markets; results of maritime discoveries, changing the commercial routes; international treaties affecting commerce; scientific and industrial discoveries affecting commerce; trade restrictions; consuls and modern commerce; boards of trade; stock and produce exchanges; modern transportation; freight express companies; insurance; modern modes of preparing and shipping articles of merchandise; circulation of commodities between cities and countries; trade statistics; dependence of manufactures upon producers of raw material; nomenclature of commerce.

UNIVERSITY OF WISCONSIN, MADISON, WIS.

The School of Commerce was established in 1900 for the purpose of supplying "facilities for the training of young men who desire to enter business careers, especially in such fields as domestic and foreign commerce and banking, or branches of the public service, like the consular, in which a knowledge of business is essential."

The course of study extends through four years and leads to the degree of Bachelor of Commercial Science. The studies of the school are grouped in three classes: (1) Those required of all students, no matter what business they desire to enter. (2) Specially arranged and correlated electives leading to the particular business which the student intends to enter. (3) Free electives chosen for the purpose of general culture.

I. REQUIRED STUDIES.

The courses belonging to this group are of three sorts:

(a) Those needed as a foundation or preparation for more technical courses which are to follow. Under this head fall the courses in trigonometry, chemistry, physics, mediæval, modern, and American history, and economic geography. Trigonometry is needed in the study of physics; chemistry is essential to the study of the materials of commerce and their adulterations, and physics lays the foundation for the study of the generation and transmission of power, materials of construction, etc. The courses in history and economic geography are essential to the successful study of the subjects enumerated under (b), and they are also of direct practical advantage in extending the student's horizon and in giving him such an acquaintance with national habits and characteristics and such skill in the interpretation of men and events as are essential to the highest success in business.

(b) This group includes a number of courses designed to acquaint the student with the structure of the business and commercial world, and with the methods of conducting modern business enterprises. Under this head fall the courses in the industrial history of England, the history of commerce, business forms and accounts, transportation, banking and the mechanism of exchange, business organization and management, commercial law and economics.

(c) The studies belonging to this group are as essential to the general equipment of the business man, no matter what particular branch of business he pursues, as those mentioned under (a) and (b). It includes German, French, and Spanish. In one of these languages, at least, he must acquire such facility in reading, speaking, and writing as will enable him successfully to conduct business in the countries in which the language he has learned is spoken. An opportunity to elect a second language is open to students after the freshman year. For the coming year, besides the above-named languages, Italian and Russian are available for such election. This group also includes a series of graded courses in the study of English, designed to enable the student to use his mother tongue fluently and correctly. It includes also a course in the generation and transmission of power, designed to give the business men who graduate from this school a knowledge of the natural sources and limitations of water, steam, and electric power, and of the important place which these physical agencies occupy in the successful conduct of business enterprises.

A careful, technical study of some group of products is also required of all students. So far as possible, each one will be allowed to select the group in which he is most interested and which will best fit him for the business he expects to

follow. As an indispensable aid to studies of this sort a commercial museum is being accumulated. The university already possesses a collection of about 5,000 economic plants with samples of the products into which they enter and materials for the illustration of the processes of their manufacture, and the beginnings of a valuable chemical collection which will be made the basis of a technical study of the most important chemical industries. Two courses are available for election based upon these two collections respectively. Other courses along this line will be offered as the commercial museum grows.

II. TECHNICAL ELECTIVES.

In addition to the studies enumerated above and required of all students, groups of courses have been arranged extending throughout the junior and senior years and designed to furnish special preparation for particular lines of business. Each student is required to elect one of these groups. Two such groups are available, one preparatory to the business of banking and the other to the consular service.

The first mentioned group consists of the following courses: (a) The elements of money and banking; (b) the history of the currencies of the chief modern nations; (c) corporation finance and securities; and (d) commercial crises with especial reference to their influence upon the banking business.

The consular group consists of the following courses: (a) international law; (b) commercial geography of Europe; (c) history of diplomacy; (d) history and characteristic features of the consular services of the chief foreign countries; (e) the consular service of the United States.

The school also expects to offer one or more courses of lectures by specialists on various phases of South American and West Indian commerce designed to be of especial value to young men who may desire to engage in commerce in those parts of the world.

III. FREE ELECTIVES.

From three to five hours per week, beginning with the second semester of the sophomore year and extending throughout the junior and senior years, will be available to the students of this school for free electives. A large number of courses in the various departments of the university will be open to them, and they will be urged to make such selections as will contribute most to the increase of their general culture and to the extension of their knowledge along lines not represented in the required work of the school.

ARRANGEMENT OF STUDIES.

The arrangement of studies for the academic year 1901-2 is as follows (the figures indicate number of hours per week):

Freshman year.—First semester: Economic geography, 4, or American history, 4; German, French, or Spanish, 4; English, 3; trigonometry, 2; chemistry, 3; drill and gymnastics, 2. Second semester: Economic geography, 4, or American history, 4; economic history of England, 2; language (continued), 4; English, 3; chemistry, 3; drill and gymnastics, 2.

Sophomore year.—First semester: History of commerce, 2; mediæval history, 3; business methods and accounts, 2; language (continued), 2; English, 2; physics, 5; drill and gymnastics, 2. Second semester: Business organization and management, 2; elementary economics, 3; modern history, 3; language (continued), 2; physics, 5; elective, 2; drill and gymnastics, 2.

Junior year.—First semester: Money and banking, 3; transportation, 2; generation and transmission of power, 3; language (continued), 2; technical elective, 3; free electives, 5. Second semester: Commercial law, 3; transportation, 2; nineteenth century history, 3; language (continued), 2; technical elective, 3; free electives, 5.

Senior year.—First semester: Commercial law, 2; materials of commerce, 3; language (continued), 2; thesis, 2; technical elective, 3; free electives, 6. Second semester: Commercial law, 2; materials of commerce, 3; language (continued), 2; thesis, 2; technical elective, 3; free electives, 6.

OUTLINE OF COURSES IN ECONOMIC HISTORY, GEOGRAPHY, AND COMMERCE.

Economic history of England.—Begins with a study of the economic life of England as depicted in the doomsday survey, and, with this as a basis, traces the most important changes in the agricultural, manufacturing, and commercial life

¹ Students who take economic geography the first semester will take American history the second, and vice versa.

of the country from that time to the present. Scott's Syllabus of Lectures and Gibbon's Industry in England. Repeated each semester. Lectures twice a week; quiz once a week.

The history of commerce: (a) The development of the world's commerce from ancient times to the Napoleonic era.—Special attention is given to the materials and the machinery of commerce, to trade routes, and to the relations between commercial development and other branches of the history of civilization. Lectures and assigned readings, first semester, twice a week.

(b) Commercial policies.—Study of commercial treaties and tariff history since the Napoleonic era. A sketch of the histories of the commercial policies pursued by the chief modern nations previous to the present century will be given by way of introduction. Lectures, assigned readings, and topics, second semester, three times a week.

Currency history.—Systematic presentation of the currency history of England, France, Germany, and the United States. Second semester, three times a week.

Commercial geography: (a) Introductory course.—A study of the technique of productive industry. Topical reports and lectures. Repeated each semester, four times a week.

(b) Extractive industries of the United States.—A study of the natural and social resources of the United States and of the chief extractive industries for the purposes of determining their location, condition, and relations to each other. Lectures and required readings. First semester, three times a week.

(c) Manufacturing industries of the United States.—The evolution, present location, and condition of the chief manufacturing industries, their relations to one another, to the extractive industries, to transportation, credit, and market agencies, and foreign trade. Lectures and required readings. Second semester, three times a week.

(d) Commercial geography of Europe.—Natural resources and industries of the chief European countries, with special emphasis on their location, their present state of development, and their relations to the commercial interests of the United States. Second semester, twice a week.

Business forms and accounts.—Various methods of accounting and auditing actually employed by and suitable to great corporations. Also a study of business forms, such as invoices, sales, accounts, custom-house documents, ships' reports and papers, bills of lading, warehouse receipts, charters, insurance policies, etc. First semester, twice a week.

Transportation: (a) Railroad transportation.—History of its development in the chief modern nations, with a discussion of its economic and legal aspects. Lectures and assigned readings. First semester, twice a week.

(b) Water transportation.—Brief historical survey of the growth of inland and ocean navigation, followed by a description of the leading water routes of the world and the industrial forces and geographical and political conditions determining them. Lectures and assigned readings. Second semester, twice a week.

Materials of commerce—(a) Vegetable.—Throughout the year two lectures per week and two hours per week of laboratory work.

(b) Chemical.—One lecture per week and two laboratory periods.

Economic crises.—Organization of the market, causes and characteristics of economic crises from the point of view of the business manager and the banker, history of crises, concrete study of the more important crises. First semester, three hours a week.

Corporation finance and securities.—Methods of financing employed in great corporations, with especial reference to the various sorts of negotiable securities which they issue and the circumstances which affect their value. A technical study of stock and produce exchanges and of their relations to the business of banking. Lectures and assigned reading. Second semester, twice a week.

Business organization and management.—Lectures, assigned readings, and topical reports. Second semester, twice a week.

Consular service—(a) Foreign consular service.—Brief outline of the growth of foreign relations, history of the consular services of the chief countries of the world, methods and work of the consular officers of the chief foreign countries. First semester, three times a week.

(b) Consular service of the United States.—Detailed study of the work and duties of the consular officers of the United States, combined with practical work in the investigation of existing industrial conditions and the making of such reports as are required of consuls. Second semester, three times a week.

South American and West Indian commerce.—Courses of lectures by specialists on commercial geography of the chief South American States, their systems of banking, exchange, currency, credits, transportation, tariff, commercial law, etc.

Seminaries.

The members of the faculty of the School of Commerce, with the subjects taught by them, are as follows: William A. Scott, Ph. D., director, economic history, elements of money and banking, currency history; Andrew A. Bruce, A. B., LL. B., law of agency and carriers; Edwin E. Bryant, law of corporations, bankruptcy, negotiable paper, and insurance; Storm Bull, M. E., generation and transmission of power; Lellen S. Cheney, M. S., materials of commerce; Victor Coffin, Ph. D., modern European, nineteenth century, and diplomatic history; William F. Giese, A. M., French and Spanish; Charles N. Gregory, A. M., LL. B., law of patents; Charles H. Haskins, Ph. D., mediæval history; Edward D. Jones, Ph. D.,¹ commercial geography and commercial crises; Edward Kremers, Ph. G., Ph. D., materials of commerce; Victor Lenher, Ph. D., chemistry; Balthaser H. Meyer, Ph. D., transportation, history of commerce, corporation finance and securities; James C. Monaghan, A. B., consular service, commercial geography, business forms and accounts; George R. Noyes, Ph. D., Russian; Paul S. Reinsch, Ph. D., LL. B., law of real and personal property, contracts, sales, and procedure; Ernest B. Skinner, Ph. D., trigonometry; Howard L. Smith, A. B., LL. B., law of partnership; Benjamin W. Snow, Ph. D., physics; William G. Bleyer, M. L., English; R. E. Neil Dodge, A. M., English; Carl R. Fish, Ph. D., American history; Edward L. Hancock, B. S., trigonometry; Gustavus A. Kleene, Ph. D., elementary economics; Otto Patzer, B. L., French; Edwin C. L. C. Roedder, Ph. D., German; Samuel E. Sparling, Ph. D., business organization and management; Edward A. Thurber, A. M., English.

UNIVERSITY OF WYOMING, LARAMIE, WYO.

The school of commerce offers a course of study that may be completed in three years. The course is divided into two parts—the department of bookkeeping and practice and the department of shorthand—each extending through two years, but both of which may be completed by a student in three years.

The course in the department of bookkeeping and business practice is as follows:

First year.—English history, bookkeeping, commercial arithmetic, raw materials of commerce, commercial geography, spelling and penmanship, business forms, business correspondence.

Second year.—English, history, civil government, bookkeeping, drawing, commercial arithmetic, penmanship and spelling, business law, history of commerce and transportation.

The course in the department of shorthand is similar to the above, stenography and typewriting being substituted for some of the commercial branches.

STATISTICS.

The number of students in the colleges or courses of commerce and finance during the year 1900-1901, so far as reported, was as follows:

University of California, Berkeley, Cal.	41
Colorado Agricultural College, Fort Collins, Colo.	83
University of Chicago, Chicago, Ill.	88
Louisiana State University, Baton Rouge, La.	33
Nevada State University, Reno, Nev.	1
Dartmouth College, Hanover, N. H.	15
New York University, New York, N. Y.	67
Central High School, Philadelphia, Pa.	362
University of Pennsylvania, Philadelphia, Pa.	139
University of South Dakota, Vermillion, S. Dak.	82
Utah Agricultural College, Logan, Utah.	44
University of Vermont, Burlington, Vt.	1
Washington Agricultural College, Pullman, Wash.	50
West Virginia University, Morgantown, W. Va.	52
University of Wisconsin, Madison, Wis.	81
University of Wyoming, Laramie, Wyo.	45

¹ Elected assistant professor of commerce and industry in the University of Michigan.

CHAPTER XXVI.

LIST OF EDUCATIONAL PERIODICALS IN THE UNITED STATES.

(1) ARRANGED BY STATES.

Alabama.

- Birmingham, Educational Exchange, M., 1901, vol. 16.
Huntsville, The Educator, M., 1901, vol. 3.
Normal, Normal Index, W., 1901, vol. 15.

Arkansas.

- Little Rock, Arkansas School Journal, M., 1901, vol. 6.

California.

- Berkeley, University Chronicle, Bi-m., 1901, vol. 4.
San Francisco, Western Journal of Education, M., 1901, vol. 16.

Colorado.

- Denver, Colorado School Journal, M., 1901, vol. 16.

Connecticut.

- Meriden, Connecticut School Journal, W., 1901, vol. 7.
New Haven, Yale Review, M., 1901, vol. 10.

District of Columbia.

- Washington, American Annals of the Deaf, Qu., 1901, vol. 47.
Washington, Catholic University Bulletin, Qu., 1901, vol. 7.
Washington, National Capital Searchlight, M., 1901, vol. 1.

Florida.

- Jacksonville, Florida School Exponent, M., 1901, vol. 8.

Georgia.

- Atlanta, Georgia Education, M., 1901, vol. 3.
Atlanta, Southern Educational Journal, M., 1901, vol. 14.

Illinois.

- Bloomington, School and Home Education, M., 1901, vol. 20.
Chicago, Biblical World, M., 1901, vol. 15.
Chicago, Chicago Teacher, M., 1901, vol. 3.
Chicago, Child Garden, M., 1901, vol. 9.
Chicago, Child Study Monthly, M., 1901, vol. 7.
Chicago, Course of Study, Chicago Institute, M., 1901, vol. 2.
Chicago, Dial (The), M., 1901, vol. 29.
Chicago, Educational Forum, M., 1901, vol. 4.

Illinois—Continued.

- Chicago, Educational School-Record, M., 1901, vol. 2.
Chicago, Kindergarten Magazine, M., 1901, vol. 14.
Chicago, Manual Training Magazine, Qu., 1901, vol. 3.
Chicago, Music, M., 1901, vol. 19.
Chicago, Progress, M., 1901, vol. 6.
Chicago, Review of Education, M., 1901, vol. 7.
Chicago, School Review, M., 1901, vol. 9.
Chicago, School Science, M., 1901, vol. 1.
Chicago, School Weekly, W., 1901, vol. 7.
Chicago, University Record, W., 1901, vol. 6.
Normal, Illinois Society for Child Study, Qu., 1901, vol. 6.
Oak Park, Intelligence, Semi-m., 1901, vol. 21.
Taylorsville, School News and Practical Educator, M., 1901, vol. 15.

Indiana.

- Elkhart, Educational News, M., 1901, vol. 6.
Indianapolis, Inland Educator and Indiana School Journal, M., 1901, vol. 2.
Indianapolis, School Music, M., 1901, vol. 2.

Iowa.

- Boonesboro, Boone County Teacher, M., 1901, vol. 12.
Cedar Rapids, The Western Penman, M., 1901, vol. 18.
Charles City, Iowa Teacher, M., 1901, vol. 16.
Des Moines, Midland Schools, M., 1901, vol. 16.
Dubuque, Iowa Normal Monthly, M., 1901, vol. 24.
Keokuk, School Music Monthly, M., 1901, vol. 2.

Kansas.

- Emporia, State Normal Monthly, M., 1901, vol. 3.
Emporia, Paidology, Qu., 1901, vol. 2.
Lawrence, Kansas University Quarterly, Qu., 1901, vol. 10.
Manhattan, Industrialist (The), M., 1901, vol. 28.
New Albany, Country School Champion, M., 1901, vol. 4.
Topeka, Western School Journal, M., 1901, vol. 18.

Louisiana.

- New Orleans, Teachers' Outlook, M., 1901, vol. 2.

(1) ARRANGED BY STATES—Continued.

Maine.

Farmington, School World, M., 1901, vol. 21.

Maryland.

Baltimore, Johns Hopkins University Circular, M., 1901, vol. 21.

Baltimore, New Pedagogue (The), M., 1901, vol. 3.

Massachusetts.

Boston, American Kitchen Magazine, M., 1901, vol. 14.

Boston, American Physical Education Review, Qu., 1901, vol. 3.

Boston, American Primary Teacher, M., 1901, vol. 19.

Boston, Boston Academy, Qu., 1901, vol. 15.

Boston, Boston Cooking School Magazine, Bi-m., 1901, vol. 6.

Boston, Education, M., 1901, vol. 22.

Boston, Germania, M., 1901, vol. 13.

Boston, Journal of Education, W., 1901, vol. 53.

Boston, Literary World, Semi-m., 1901, vol. 32.

Boston, Popular Educator, M., 1901, vol. 18.

Boston, Posse Gymnasium Journal, M., 1901, vol. 9.

Boston, Practical Psychology, M., 1901, vol. 1.

Boston, Primary Education, M., 1901, vol. 9.

Boston, School Physiology Journal, M., 1901, vol. 11.

Boston, Technological Quarterly, Qu., 1901, vol. 14.

Cambridge, The People, M., 1901, vol. 3.

Springfield, Kindergarten Review, M., 1901, vol. 12.

Worcester, Seminary (The), Qu., 1901, vol. 8.

Worcester, American Journal of Psychology, Qu., 1901, vol. 13.

Michigan.

Lansing, Michigan School Operator, Semi-m., 1901, vol. 22.

Minnesota.

Minneapolis, School Education, M., 1901, vol. 20.

Mississippi.

Jackson, Mississippi School Journal, M., 1901, vol. 7.

Missouri.

Jefferson City, Missouri School Journal, M., 1901, vol. 18.

Kansas City, Western College Magazine, M., 1901, vol. 6.

St. Louis, Evangelish-Lutherisches Schulblatt, M., 1901, vol. 36.

St. Louis, School and Home, M., 1901, vol. 19.

Nebraska.

Lincoln, Nebraska Teacher, M., 1900, vol. 4.

Omaha, Nebraska Mute Journal, M., 1901, vol. 29.

Santee Agency, Word Carrier, M., 1901, vol. 30.

New Hampshire.

Manchester, Notes and Queries, M., 1901, vol. 20.

New Jersey.

Ringoes, Journal of Orthoeopi and Orthografi, M., 1901, vol. 18.

Trenton, Silent Worker (The), M., 1901, vol. 14.

New York.

Albany, American Education from Kindergarten to College, M., 1901, vol. 5.

Dansville, Normal Instructor, M., 1901, vol. 10.

Malone, Mentor (The), M., 1901, vol. 7.

Newark Valley, Educational Review, M., 1901, vol. 2.

New York, American School Board Journal, M., 1901, vol. 21.

New York, American University Magazine, Bi-m., 1901, vol. 8.

New York, Art Amateur (The), M., 1901, vol. 43.

New York, Art Education, Bi-m., 1901, vol. 8.

New York, Columbia University Quarterly, Qu., 1901, vol. 4.

New York, Deaf Mutes' Journal, W., 1901, vol. 30.

New York, Educational Foundations, M., 1901, vol. 13.

New York, Educational Review, M., 1901, vol. 21.

New York, Literary Digest, W., 1901, vol. 21.

New York, Journal of Mental Pathology, M., 1901, vol. 1.

New York, New Education, M., 1901, vol. 14.

New York, Our Times, Semi-m., 1901, vol. 18.

New York, Penman's Art Journal, M., 1901, vol. 26.

New York, Pitman's Phonetic Journal, W., 1901, vol. 59.

New York, Pitman's Shorthand Weekly, W., 1901, vol. 25.

New York, Pratt Institute Monthly, M., 1901, vol. 9.

New York, Primary School, M., 1901, vol. 11.

New York, School, W., 1901, vol. 13.

New York, School Journal, W., 1901, vol. 61.

New York, The Schoolmaster, M., 1901, vol. 3.

New York, School Music Review, M., 1901, vol. 10.

New York, Sunday School Journal, M., 1901, vol. 33.

New York, Teachers' Institute, M., 1901, vol. 23.

New York, Teachers' World, M., 1901, vol. 13.

New York, Werner's Magazine, M., 1901, vol. 26.

Rochester, Educational Gazette, M., 1901, vol. 17.

Syracuse, Journal of Pedagogy, Qu., 1901, vol. 14.

Syracuse, School Bulletin, M., 1901, vol. 28.

North Carolina.

Greensboro, State Normal Magazine, M., 1901, vol. 14.

Salem, Academy, M., 1901, vol. 24.

Ohio.

Akron, Home and School, M., 1901, vol. 3.

Cincinnati, Christian Educator, Bi-m., 1901, vol. 12.

Cincinnati, National Humane Educator, M., 1901, vol. 13.

(1) ARRANGED BY STATES—Continued.

Ohio—Continued.

- Columbus, Ohio Chronicle for Deaf and Dumb, W., 1901, vol. 34.
 Columbus, Ohio Educational Monthly, M., 1901, vol. 50.
 Lebanon, The Teachers' Outlook, M., 1901, vol. 1.
 Marietta, Ohio Teacher, M., 1901, vol. 22.

Oklahoma.

- Norman, Oklahoma School Herald, M., 1901, vol. 10.

Oregon.

- Salem, Oregon Teachers' Monthly, M., 1901, vol. 5.

Pennsylvania.

- Allentown, National Educator, M., 1901, vol. 42.
 Edinboro, Educational Independent, W., 1901, vol. 9.
 Harrisburg, School Gazette, M., 1901, vol. 13.
 Huntingdon, Juniata Echo, M., 1901, vol. 10.
 Lancaster, Journal of School Geography, M., 1901, vol. 5.
 Lancaster, Pennsylvania School Journal, M., 1901, vol. 50.
 Meadville, Chautauquan (The), M., 1901, vol. 31.
 Millersville, Normal Journal, Qu., 1901, vol. 15.
 Mount Airy-Philadelphia, Association Review, Bi-m., 1901, vol. 3.
 Philadelphia, Journal of Franklin Institute, M., 1901, vol. 151.
 Philadelphia, Stenographer (The), M., 1901, vol. 16.
 Philadelphia, Teacher (The), M., 1901, vol. 6.
 Scranton, Science and Industry, M., 1901, vol. 1.

South Carolina.

- Aiken, Schofield School Bulletin, M., 1901, vol. 12.

South Dakota.

- Madison, South Dakota Journal of Education, M., 1901, vol. 2.

South Dakota—Continued.

- Mitchell, South Dakota Educator, M., 1901, vol. 15.

Tennessee.

- Nashville, New Century Education, M., 1901, vol. 3.
 Nashville, Progressive Teacher (The), M., 1901, vol. 7.

Texas.

- Austin, Texas School Journal, M., 1901, vol. 13.
 Dallas, Texas School Magazine, M., 1901, vol. 4.
 Stephenville, Erath Journal of Education, M., 1901, vol. 2.

Virginia.

- Hampton, Southern Workman and Hampton School Record, M., 1901, vol. 30.
 Richmond, Atlantic Educational Journal, M., 1901, vol. 4.
 Richmond, Virginia School Journal, M., 1901, vol. 10.
 Williamsburg, William and Mary College Quarterly, Qu., 1901, vol. 10.

Washington.

- Seattle, Northwest Journal of Education, M., 1901, vol. 13.
 Vancouver, Washingtonian (The), Semi-m., 1901, vol. 10.

West Virginia.

- Charleston, West Virginia School Journal, M., 1901, vol. 22.

Wisconsin.

- Madison, Wisconsin Journal of Education, M., 1901, vol. 31.
 Milwaukee, American Journal of Education, M., 1901, vol. 35.
 Milwaukee, Lutherische Schulzeitung, M., 1901, vol. 27.
 Milwaukee, Mind and Body, M., 1901, vol. 8.
 Milwaukee, Pädagogische Monatshefte, M., 1901, vol. 3.
 Milwaukee, Western Teacher, M., 1901, vol. 13.

(2) ARRANGED BY SUBJECTS.

Common school education, elementary and secondary.

- Academy (The)—N. C.
 American Education—N. Y.
 American Journal of Education—Wis.
 American Primary Teacher—Mass.
 Arkansas School Journal—Ark.
 Atlantic Educational Journal—Va.
 Boone County Teacher—Ia.
 Chicago Teacher—Ill.
 Colorado School Journal—Col.
 Connecticut School Journal—Conn.
 Country School Champion—Kan.
 Course of Study, Chicago Institute—Ill.
 Education—Mass.
 Educational Exchange—Ala.
 Educational Forum—Ill.
 Educational Foundations—N. Y.
 Educational Gazette—N. Y.
 Educational Independent—Pa.
 Educational News—Ind.

Common school education, elementary and secondary—Continued.

- Educational Review—N. Y.
 Educational School Record—Ill.
 Educator (The)—Ala.
 Evangelisch-Lutherisches Schulblatt—Mo.
 Florida School Exponent—Fla.
 Georgia Education—Ga.
 Home and School—O.
 Inland Educator and Indiana School Journal—Ind.
 Intelligence—Ill.
 Iowa Teacher—Ia.
 Journal of Education—Mass.
 Journal of Education—Tex.
 Juniata Echo—Pa.
 Lutherische Schulzeitung—Wis.
 Mentor—N. Y.
 Michigan School Moderator—Mich.
 Midland Schools—Ia.
 Minnesota School Journal—Minn.

(2) ARRANGED BY SUBJECTS—Continued.

Common school education, elementary and secondary—Continued.

Mississippi School Journal—Miss.
 Missouri School Journal—Mo.
 National Capital Searchlight—D. C.
 National Educator—Pa.
 Nebraska Teacher—Neb.
 New Century Education—Tenn.
 New Education—N. Y.
 New Pedagogue—Md.
 Normal Index—Ala.
 Northwest Journal of Education—Wash.
 Ohio Educational Monthly—O.
 Ohio Teacher—O.
 Oklahoma School Herald—Okla.
 Oregon Teachers' Monthly—Or.
 Our Times—N. Y.
 Paedagogische Monatshefte—Wis.
 Pennsylvania School Journal—Pa.
 People (The)—Mass.
 Popular Educator—Mass.
 Primary Education—Mass.
 Primary School—N. Y.
 Progressive Teacher—Tenn.
 Review of Education—Ill.
 Schofield School Bulletin—S. C.
 School—N. Y.
 School and Home—Mo.
 School and Home Education—Ill.
 School Bulletin—N. Y.
 School Education—Minn.
 School Gazette—Pa.
 School Journal—N. Y.
 Schoolmaster (The)—N. Y.
 School News and Practical Educator—Ill.
 School Weekly—Ill.
 School World—Me.
 Seminary—Mass.
 South Dakota Educator—S. Dak.
 South Dakota Journal of Education—S. Dak.
 Southern Educational Journal—Ga.
 Teacher (The)—Pa.
 Teachers' Outlook—La.
 Teachers' Outlook—O.
 Teachers' World—N. Y.
 Texas School Journal—Tex.
 Texas School Magazine—Tex.
 Virginia School Journal—Va.
 Washingtonian (The)—Wash.
 Western Journal of Education—Cal.
 Western School Journal—Kan.
 Western Teacher—Wis.
 West Virginia School Journal—W. Va.
 Wisconsin Journal of Education—Wis.
 Word Carrier—Neb.

Kindergarten education.

Child Garden—Ill.
 Kindergarten Magazine—Ill.
 Kindergarten Review—Mass.

Secondary education, exclusively or chiefly.

Boston Academy—Mass.
 Educational Review—N. Y.
 Journal of Pedagogy—N. Y.
 School Review—Ill.
 School Science—Ill.

Normal school education.

Education Extension—Mich.
 Iowa Normal Monthly—Ia.
 Normal Instructor—N. Y.
 Normal Journal—Pa.
 State Normal Magazine—N. C.
 State Normal Monthly—Kans.
 Teachers' Institute—N. Y.

University publications.

American University Magazine—N. Y.
 Catholic University Bulletin—D. C.
 Columbia University Quarterly—N. Y.
 Johns Hopkins University Circular—Md.
 Seminary (The)—Mass.
 University Chronicle—Cal.
 University Quarterly—Kans.
 University Record—Ill.
 Western College Magazine—Mo.
 William and Mary College Quarterly—Va.

Physical education.

American Physical Education Review—Mass.
 Mind and Body—Wis.
 Posse Gymnasium Journal—Mass.

Religious and moral education.

Biblical World—Ill.
 Christian Education—O.
 National Humane Educator—O.
 Sunday School Journal—N. Y.

Art education.

Art Amateur—N. Y.
 Art Education—N. Y.

Child study and psychology.

American Journal of Psychology—Mass.
 Child Study Monthly—Ill.
 Illinois Society for Child Study—Ill.
 Journal of Mental Pathology—N. Y.
 Practical Psychology—Mass.

Industrial and technical education.

Industrial (The)—Kans.
 Journal of Franklin Institute—Pa.
 Manual Training Magazine—Ill.
 Technological Quarterly—Mass.
 Pratt Institute Monthly—N. Y.
 Science and Industry—Pa.
 Southern Workman and Hampton School Record—Va.

Deaf-mutes' education.

American Annals of the Deaf—D. C.
 Association Review—Pa.
 Deaf-Mutes' Journal—N. Y.
 Nebraska Mute Journal—Neb.
 Ohio Chronicle—O.
 Silent Worker—N. J.

Domestic education.

American Kitchen Magazine—Mass.
 Boston Cooking School Magazine—Mass.

Language and elocution.

Germania—Mass.
 Werner's Magazine—N. Y.

(2) ARRANGED BY SUBJECTS—Continued.

Calligraphy and stenography.

Journal of Orthoepeia and Orthograp̄i—N. J.
 Penman's Art Journal—N. Y.
 Pitman's Shorthand Weekly—N. Y.
 Pitman's Phonetic Journal—N. Y.
 Stenographer (The)—Pa.
 Western Penman—Ia.

Music.

Music—Ill.
 School Music Monthly—Ia.
 School Music Review—N. Y.

Geography.

Journal of School Geography—Pa.

Physiology.

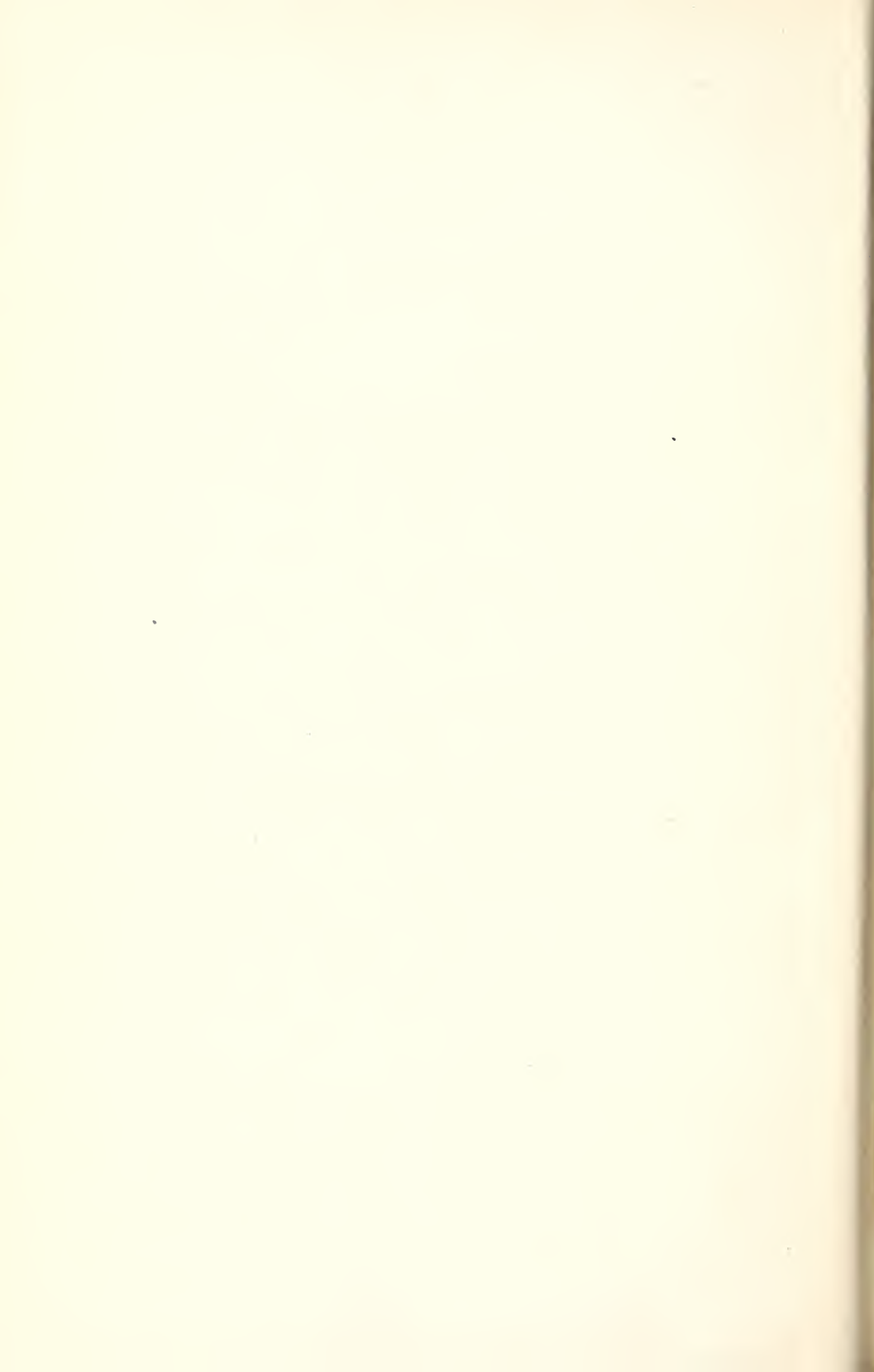
School Physiological Journal—Mass.

School administration.

School Board Journal—N. Y.

Literature and criticism.

Chautauquan (The)—Pa.
 Dial (The)—Ill.
 Literary Digest—N. Y.
 Literary World—Mass.
 Notes and Queries—N. H.
 Progress—Ill.



CHAPTER XXVII.

EDUCATIONAL DIRECTORY.¹

I.—CHIEF STATE SCHOOL OFFICERS.

Name.	Address.	Official designation.
H. C. Gunnels	Montgomery, Ala	State superintendent of education.
Sheldon Jackson	Sitka, Alaska	General agent of education.
Robert L. Long	Phoenix, Ariz	Territorial superintendent of public instruction.
J. J. Doyne	Little Rock, Ark	State superintendent of public instruction.
Thomas J. Kirk	Sacramento, Cal	Do.
Mrs. Helen L. Grenfell	Denver, Colo	Do.
Charles D. Hine	Hartford, Conn	Secretary of State board of education.
P. B. Norman, jr	Dover, Del	Do.
A. T. Stuart	Washington, D. C.	Superintendent of District schools.
W. N. Sheats	Tallahassee, Fla	State superintendent of public instruction.
Gustavus R. Glenn	Atlanta, Ga	State school commissioner.
Miss Permeal French	Boise, Idaho	State superintendent of public instruction.
Alfred Bayliss	Springfield, Ill.	Do.
John D. Benedict	Muscogee, Ind. T	Territorial superintendent of schools.
Frank L. Jones	Indianapolis, Ind	State superintendent of public instruction.
R. C. Barrett	Des Moines, Iowa	Do.
Frank Nelson	Topeka, Kans	Do.
H. V. McChesney	Frankfort, Ky	Do.
J. V. Calhoun	Baton Rouge, La	State superintendent of public education.
W. W. Stetson	Augusta, Me	State superintendent of public schools.
M. Bates Stephens	Baltimore, Md	State superintendent of public instruction.
Frank A. Hill	Boston, Mass	Secretary of State board of education.
Delos Fall	Lansing, Mich	State superintendent of public instruction.
J. W. Olsen	St. Paul, Minn	Do.
Henry L. Whitfield	Jackson, Miss	State superintendent of public education.
W. T. Carrington	Jefferson City, Mo	State superintendent of public schools.
W. W. Welch	Helena, Mont	State superintendent of public instruction.
W. K. Fowler	Lincoln, Nebr	Do.
Orvis Ring	Carson, Nev	Do.
Channing Folsom	Concord, N. H.	Do.
Chas. J. Baxter	Trenton, N. J.	Do.
J. Franco Chavez	Santa Fe, N. Mex	Territorial superintendent of public instruction.
Charles R. Skinner	Albany, N. Y.	State superintendent of public instruction.
J. V. Joyner	Raleigh, N. C.	Do.
J. M. Devine	Bismarck, N. Dak	Do.
Lewis D. Bonebrake	Columbus, Ohio	State commissioner of common schools.
L. W. Baxter	Guthrie, Okla	Territorial superintendent of public instruction.
J. H. Ackerman	Salem, Oreg.	State superintendent of public instruction.
Nathan C. Schaeffer	Harrisburg, Pa	Do.
Thomas B. Stockwell	Providence, R. I.	Commissioner of public schools.
John J. McMahan	Columbia, S. C.	State superintendent of education.
E. E. Collins	Pierre, S. Dak	State superintendent of public instruction.
Morgan C. Fitzpatrick	Nashville, Tenn	Do.
Arthur Lefevre	Austin, Tex	Do.
A. C. Nelson	Salt Lake City, Utah	Do.
Walter E. Ranger	Montpelier, Vt	State superintendent of education.
Joseph W. Southall	Richmond, Va	State superintendent of public instruction.
R. B. Bryan	Olympia, Wash	Do.
Thomas C. Miller	Charleston, W. Va	State superintendent of free schools.
L. D. Harvey	Madison, Wis	State superintendent of public schools.
Thomas T. Tynan	Cheyenne, Wyo	State superintendent of public instruction.

¹Corrected to July, 1902, in so far as changes have been reported to the Bureau.

II.—LIST OF CITY SUPERINTENDENTS.

ALABAMA.

Anniston, D. R. Murphy.
 Bessemer, W. P. Gunn.
 Birmingham, J. H. Phillips.
 Eufaula, F. L. McCoy.
 Florence, Henry Clay Gilbert.
 Huntsville, S. R. Butler.
 Mobile, S. S. Murphy.
 Montgomery, Charles L. Floyd.
 New Decatur, R. R. Harris.
 Opelika, T. C. Pinckard.
 Phoenix, W. F. Monk.
 Selma, R. E. Hardaway.
 Tuscaloosa, James H. Foster.

ARIZONA.

Tucson, William Angus.

ARKANSAS.

Fort Smith, B. W. Torreyson.
 Helena, S. H. Spragins.
 Hot Springs, George B. Cook.
 Little Rock, J. R. Rightsell.
 Pine Bluff, J. H. Hinemon.

CALIFORNIA.

Alameda, Charles C. Hughes.
 Bakersfield, David W. Nelson.
 Berkeley, S. D. Waterman.
 Eureka, A. C. Barker.
 Fresno, C. L. McLane.
 Los Angeles, J. A. Foshay.
 Napa City, J. L. Shearer.¹
 Oakland, John W. McClymonds.
 Pasadena, James D. Graham.²
 Pomona, Frank H. Hyatt.²
 Redlands, Lewis B. Avery.
 Riverside, Howard L. Lunt.²
 Sacramento, O. W. Erlewine.
 San Bernardino, Miss Lula Claire Bahr.
 San Diego, F. P. Davidson.
 San Francisco, Reginald H. Webster.
 San Jose, Frank P. Russell.
 Santa Ana, Joseph C. Templeton.
 Santa Barbara, William A. Wilson.
 Santa Cruz, D. C. Clark.
 Santa Rosa, E. M. Cox.²
 Stockton, James A. Barr.
 Vallejo, J. J. Rippetoe.

COLORADO.

Aspen, F. J. Brownscombe.
 Boulder, William V. Casey.
 Colorado Springs, John Dietrich.
 Cripple Creek, Ezra W. Palmer.

COLORADO—Continued.

Denver:
 District No. 1, Aaron Gove.
 District No. 2, L. C. Greenlee.
 District No. 7, M. F. Miller.
 District No. 17, Charles E. Chadsey.
 Leadville, Edward C. Elliott.
 Pueblo:
 District No. 1, James S. McClung.
 District No. 20, John F. Keating.
 Trinidad, Charles V. Parker.

CONNECTICUT.

Ansonia, Wm. Alexander Smith.
 Bridgeport, Charles W. Deane.
 Bristol, C. L. Wooding.
 Danbury, A. C. Hubbard.³
 Derby, J. W. Peck.
 East Hartford, Joseph O. Goodwin,³ Charles D. Hine.⁴
 Enfield, George T. Finch.⁴
 Greenwich, Newton B. Hobart,⁵ Thomas F. Howley.³
 Hartford, Thomas S. Weaver.
 Huntington, Horace Wheeler.³
 Manchester:
 Town schools, Herbert O. Bowers.³
 Ninth district (south), F. A. Verplanck.
 Meriden, Albert B. Mather.
 Middletown, Walter B. Ferguson.
 Naugatuck, Frank W. Eaton.
 New Britain, Giles A. Stuart.
 New Haven, Frank Herbert Beede.
 New London, Charles B. Jennings.
 New Milford, Charles N. Hall.
 Norwalk, A. Blanchard.³
 Norwich:
 Central district, Nathan Lee Bishop.
 West Chelsea district, John B. Stanton.
 Putnam, W. R. Barber,³ E. H. Johnson.⁶
 Southington, Mrs. Anna D. Pollard.
 Stamford, Everett C. Willard.
 Torrington, Edwin H. Forbes.
 Vernon, W. B. Foster.⁴
 Wallingford, Malcolm Booth.
 Waterbury, B. W. Tinker.
 West Haven, Edgar C. Stiles.
 Westport, L. T. Day.³
 Winchester, H. Hungerford Drake.⁷
 Windham, George E. Hinman.⁸

DELAWARE.

Wilmington, George W. Twitmyer.

DISTRICT OF COLUMBIA.

Washington, A. T. Stuart.

¹ Principal grammar school.

² Supervising principal.

³ Secretary board of school visitors.

⁴ Acting visitor.

⁵ Principal.

⁶ School visitor.

⁷ School visitor and secretary of the board; post-office, Winsted.

⁸ Secretary of school committee; post-office, Willimantic.

II.—LIST OF CITY SUPERINTENDENTS—Continued.

FLORIDA.

Jacksonville, George P. Glenn.
 Key West, C. F. Kemp.¹
 Lake City, T. H. Owens.¹
 Pensacola, N. B. Cook.¹
 St. Augustine, E. H. Reynolds.
 Tampa, L. W. Buchholz.¹

GEORGIA.

Albany, S. R. De Jarnette.²
 Americus, J. E. Mathis.
 Athens, G. G. Bond.
 Atlanta, W. F. Slaton.
 Augusta, Lawton B. Evans.
 Brunswick, N. H. Ballard.
 Columbus, Carleton B. Gibson.
 Dalton, B. M. Thomas.
 Griffin, J. Henry Walker.
 Macon, J. M. Pound.
 Rome, James C. Harris.
 Savannah, Otis Ashmore.
 Thomasville, C. Jackson.
 Waycross, E. A. Pound.

IDAHO.

Boise, John W. Daniels.
 Pocatello, Walter R. Siders.

ILLINOIS.

Alton, Robert A. Haight.
 Aurora:
 District No. 4 (west side), A. V. Greenman.
 District No. 5 (east side), C. M. Bardwell.
 Beardstown, H. J. Jokisch.
 Belleville, H. D. Updike.
 Belvidere, Arthur J. Snyder.
 Bloomington, J. K. Stableton.
 Blue Island, J. E. Lemon.
 Cairo, Taylor C. Clendenen.
 Canton, Charles S. Aldrich.
 Centralia, S. H. Bohn.
 Champaign, Joseph Carter.
 Charleston, J. L. Hughes.
 Chicago, Edwin G. Cooley.
 Clinton, E. B. Bentley.
 Collinsville, Charles H. Dorris.
 Danville, L. H. Griffith.
 Decatur, Enoch A. Gastman.
 Dekalb, Newell D. Gilbert.
 Dixon, Charles W. Groves.
 Duquoin, Charles W. Houk.
 East St. Louis, John Richeson.
 Edwardsville, Charles W. Parkinson.
 Elgin, M. A. Whitney.
 Evanston:
 District No 1, Homer H. Kingsley.
 District No. 2, South Evanston, Fred W. Nichols.
 District No. 3, North Evanston, Mary H. O'Brien.²
 Freeport, R. S. Page.
 Galena, James W. Cupples.

ILLINOIS—Continued.

Galesburg, William L. Steele.
 Harlem, Frank Curtis.
 Harvey, F. L. Miller.
 Jacksonville, J. W. Henninger.
 Joliet, John J. Allison.
 Kankakee, F. N. Tracy.
 Kewanee, A. C. Butler.
 La Salle, J. B. McManus.
 Lincoln, B. E. Nelson.
 Litchfield, R. C. Shellenbarger.
 Macomb, R. C. Rennick.
 Maywood, J. Porter Adams.
 Mattoon, Benjamin F. Armitage.
 Metropolis City, Edward Longbons.
 Moline, William J. M. Cox.
 Monmouth, James C. Burns.
 Morris, Preston King Cross.
 Mount Carmel, W. S. Booth.
 Mount Vernon, H. J. Alvis.
 Murphysboro, Edward J. Klemme.
 Ottawa, W. A. Furr.
 Pana, William Miner.
 Paris, J. D. Shoop.
 Pekin, O. A. Shotts.
 Peoria, Newton Charles Dougherty.
 Peru, Ira M. Ong.
 Pontiac, Isaac Mitchell.
 Princeton, M. G. Clark.
 Quincy, A. A. Seehorn.
 Rockford, P. R. Walker.
 Rock Island, Herbert B. Hayden.
 Springfield, J. H. Collins.
 Spring Valley, R. V. De Groff.
 Sterling:
 District No. 3 (the Sterling schools), H. L. Chaplin.
 District No. 8 (the Wallace schools), H. A. Hollister.
 Streator, John A. Long.
 Taylorville, John A. Cheney.
 Urbana, J. W. Hays.
 Waukegan, Frank H. Hall.

INDIANA.

Alexandria, I. V. Busby.
 Anderson, John W. Carr.
 Bedford, W. E. Alexander.
 Bloomington, W. H. Glascock.
 Bluffton, William A. Wirt.
 Brazil, W. H. Fertich.
 Columbus, T. F. Fitzgibbons.
 Connorsville, W. S. Rowe.
 Crawfordsville, W. A. Millis.
 Elkhart, D. W. Thomas.
 Evansville, William A. Hester.
 Fort Wayne, Justin N. Study.
 Frankfort, George L. Roberts.
 Franklin, Horace Ellis.
 Goshen, Victor W. B. Hedgepeth.
 Greenfield, A. E. Martin.

¹ County superintendent.² Principal.

II.—LIST OF CITY SUPERINTENDENTS—Continued.

INDIANA—Continued.

Greensburg, D. M. Geeting.
 Hammond, W. H. Hershman.
 Hartford City, C. H. Drybread.
 Huntington, Robert I. Hamilton.
 Indianapolis, Calvin N. Kendall.
 Jeffersonville, A. C. Goodwin.
 Kokomo, Robert A. Ogg.
 Lafayette, Edward Ayres.
 Laporte, John A. Wood.
 Lawrenceburg, T. H. Meek.
 Lebanon, C. A. Peterson.
 Logansport, Albert H. Douglass.
 Madison, C. M. McDaniels.
 Marion, Benjamin F. Moore.
 Martinsville, J. E. Robinson.
 Michigan City, Paul A. Cowgill.
 Mishawaka, Byron J. Bogue.
 Mount Vernon, Edwin S. Monroe.
 Muncie, W. R. Snyder.
 New Albany, C. A. Prosser.
 Peru, A. A. Campbell.
 Portland, John A. Hill.
 Princeton, Charles N. Peak.
 Richmond, Thomas A. Mott.
 Rushville, A. G. McGregor.
 Seymour, H. C. Montgomery.
 Shelbyville, James H. Tomlin.
 South Bend, Calvin Moon.
 Terre Haute, William H. Wiley.
 Valparaiso, Charles Henderson Wood.
 Vincennes, Albert E. Humke.
 Wabash, Miles W. Harrison.
 Washington, Wm. F. Axtell.

IOWA.

Atlantic, Carlos M. Cole.
 Boone, J. C. King.
 Burlington, Francis M. Fultz.
 Cedar Falls, D. M. Kelly.
 Cedar Rapids, J. J. McConnell.
 Centerville, F. E. King.
 Charles City, George S. Dick.
 Clinton, O. P. Bostwick.
 Council Bluffs, W. N. Clifford.
 Creston, O. E. French.
 Davenport, J. B. Young.
 Des Moines:
 East Side, Amos Hiatt.
 West Side, Samuel H. Sheakley.
 Capital Park, Z. C. Thornburg.
 Dubuque, F. T. Oldt.
 Fairfield, J. E. Williamson.
 Fort Dodge, E. N. Coleman.
 Fort Madison, C. W. Cruikshank.
 Iowa City, S. K. Stevenson.
 Keokuk, O. W. Weyer.
 Le Mars, Anson H. Bigelow.
 Marion, G. E. Finch.
 Marshalltown, F. E. Willard.
 Mason City, L. D. Ellis.
 Missouri Valley, A. B. Warner.
 Mount Pleasant, Frank Whittier Else.
 Muscatine, W. F. Chevalier.
 Oelwein, L. B. Moffett.

IOWA—Continued.

Oskaloosa, S. J. Finley.
 Ottumwa, A. W. Stuart.
 Red Oak, G. W. Bryan.
 Sioux City, W. M. Stevens.
 Washington, W. A. Pratt.
 Waterloo:
 East Side, F. H. Bloodgood.
 West Side, A. T. Hukill.
 Webster City, L. H. Ford.

KANSAS.

Argentine, H. P. Butcher.
 Arkansas City, W. M. Fisher.
 Atchison, Nathan T. Veatch.
 Coffeyville, W. E. Ringle.
 Emporia, L. A. Lowther.
 Fort Scott, David M. Bowen.
 Galena, J. A. Higdon.
 Hutchinson, George W. Winans.
 Iola, Mrs. Clifford A. Mitchell.
 Junction City, William S. Heusner.
 Kansas City, L. E. Wolfe.
 Lawrence, Frank P. Smith.
 Leavenworth, Miss Mamie E. Dolphin.
 Newton, G. W. Kendrick.
 Ottawa, Walter H. Olin.
 Parsons, N. McDonald.
 Pittsburg, R. S. Russ.
 Salina, A. Ludlum.
 Topeka, W. M. Davidson.
 Wellington, H. F. M. Bear.
 Wichita, Frank R. Dyer.
 Winfield, J. W. Spindler.

KENTUCKY.

Ashland, John Grant Crabbe.
 Bellevue, F. S. Alley.
 Bowling Green, Edward Taylor.
 Covington, John Morris.
 Danville, W. C. Grinstead.
 Dayton, E. P. West.
 Frankfort, H. V. McChesney.
 Henderson, R. L. McDonald.
 Hopkinsville, Livingstone McCartney.
 Lexington, William Rogers Clay.
 Louisville, Edgar H. Mark.
 Maysville, G. W. Blatterman.
 Middlesboro, J. B. Taylor.
 Newport, John Burke.
 Owensboro, McHenry Rhoads.
 Paducah, C. B. Hatfield.
 Paris, A. O. Reubelt.
 Richmond, J. D. Clark.
 Winchester, R. M. Shiff.

LOUISIANA.

Alexandria, A. M. Hendon.
 Baton Rouge, R. C. Gordon.
 Crowley, J. E. Barry.
 Donaldsonville, Richard McCulloch.
 Lake Charles, John McNeese.
 Monroe, D. B. Showalter.
 New Iberia, W. B. Hale.
 New Orleans, Warren Easton.

II.—LIST OF CITY SUPERINTENDENTS—Continued.

LOUISIANA—Continued.

Shreveport:

C. E. Byrd (principal high school and acting city superintendent under J. C. Monroe, superintendent Caddo Parish).

MAINE.

Auburn, Bertram C. Richardson.

Augusta:

Mrs. Caroline S. Fogg (superintendent suburban and high schools).

Weston Lewis (principal Williamsdistrict).

Bangor, Charles E. Tilton.

Bath, Edward H. McLachlin.

Belfast, John R. Duntun.

Biddeford, Royal E. Gould.

Brewer, Mrs. Mertie M. Curtis.

Calais, J. F. Ryan.

Eastport, H. E. Bryant.

Ellsworth, W. H. Dresser.

Gardiner, L. M. Sanborn.

Lewiston, I. C. Phillips.

Old Town, Miss Ardelie M. Tozier.

Portland, Orlando M. Lord.

Rockland, G. C. Minard.

Saco, John S. Locke.

Skowhegan, D. W. Colby.

South Portland, James Otis Kaler.

Waterville, Elwood T. Wyman.

Westbrook, Fred. Benson.

MARYLAND.

Annapolis, Charles E. Dryden.

Baltimore, J. H. Van Sickle.

Cambridge, W. P. Beckwith.¹

Cumberland, John T. White.¹

Frederick, Ephraim L. Boblitz.¹

Hagerstown, John P. Fockler.¹

MASSACHUSETTS.

Abington, W. H. Sanderson.

Adams, Francis A. Bagnall.

Amesbury, E. O. Perkins.²

Amherst, A. L. Hardy.

Andover, Corwin F. Palmer.

Arlington, Frank S. Sutcliffe.

Athol, W. Scott Ward.

Attleboro, William P. Kelly.

Barnstable, F. W. Kingman.

Belmont, George P. Armstrong.

Beverly, Adelbert Leon Safford.

Blackstone, Josiah B. Davis.

Boston, Edwin P. Seaver.

Braintree, Irving W. Horne.

Bridgewater, W. H. Sanderson.

Brockton, B. B. Russell.

Brookline, George I. Aldrich.

Cambridge, Francis Cogswell.

Canton, James S. Perkins.

Chelsea, ———.

Chicopee, John C. Gray.

Clinton, Charles L. Hunt.

MASSACHUSETTS—Continued.

Concord, William L. Eaton.

Danvers, A. P. Learoyd.²

Dedham, Roderick Whittlesey Hine.

Easthampton, W. D. Miller.

Easton, Osman C. Evans.

Everett, ———.

Fall River, William C. Bates.

Fitchburg, Joseph G. Edgerly.

Framingham, Samuel F. Blodgett.

Franklin, Irving H. Gamwell.

Gardner, Judson I. Wood.

Gloucester, Freeman Putney.

Grafton, W. H. Holmes, jr.

Great Barrington, Gilman C. Fisher.

Greenfield, G. H. Danforth.

Haverhill, Roscoe D. McKeen.

Hingham, Nelson G. Howard.

Holyoke, Louis P. Nash.

Hudson, James G. Morrell.

Hyde Park, William G. Colesworthy.²

Ipswich, John H. Cogswell.²

Lawrence, John E. Burke.

Leominster, Thomas E. Thompson.

Lowell, Arthur K. Whitcomb.

Lynn, Frank J. Peaslee.

Malden, George E. Gay.

Manchester, George P. Armstrong.

Mansfield, Edward B. Fitts.

Marblehead, John B. Gifford.

Marlboro, J. Asbury Pitman.

Medford, Charles H. Morss.

Melrose, Fred H. Nickerson.

Merrimac, F. E. Pease.³

Methuen, A. Everett White.

Middleboro, Charles H. Bates.

Milford, Charles W. Haley.

Millbury, C. S. Lyman.

Milton, Asher J. Jacoby.

Montague, F. P. Davison.

Natick, Albert L. Barbour.

Needham, Henry M. Walradt.

New Bedford, William E. Hatch.

Newburyport, William P. Lunt.

Newton, Albert B. Fifield.

North Adams, Isaac Freeman Hall.

Northampton, J. H. Carfrey.

North Andover, George E. Chickering.

North Attleboro, James W. Brehant.

Northbridge, S. A. Melcher.

Norwood, A. P. Wagg.

Orange, Edward Dixon.

Palmer, A. C. Thompson.

Peabody, Lester L. Burrington.

Pittsfield, Eugene Bouton.

Plymouth, Francis J. Heavens.

Provincetown, Alvan R. Lewis.

Quincy, Frank Edson Parlan.

Reading, Melville A. Stone.

Revere, William H. Winslow.

Rockland, William C. Hobbs.

Rockport, Nathaniel Richardson.

Salem, John Wright Perkins.

¹ County school examiner.

² Secretary of the school committee.

³ Chairman of the school committee.

II.—LIST OF CITY SUPERINTENDENTS—Continued.

MASSACHUSETTS—Continued.

Saugus, Charles E. Stevens.
 Somerville, Gordon A. Southworth.
 Southbridge, John T. Clarke.
 South Hadley, A. H. Campbell.
 Spencer, George I. Clapp.
 Springfield, Thomas M. Balliet.
 Stoneham, Charles E. Stevens.
 Stoughton, Edward P. Fitts.
 Swampscott, Harold C. Childs.¹
 Taunton, C. F. Boyden.
 Upton, W. H. Holmes, jr.
 Wakefield, U. G. Wheeler.
 Waltham, William D. Parkinson.
 Ware, Samuel W. Hallett.
 Warren, O. H. Adams.
 Watertown, Frank R. Page.
 Webster, A. H. Morse.
 Wellesley, Marshall Livingston Perria.
 Westboro, H. C. Waldron.
 Westfield, Stanley H. Holmes.
 West Springfield, C. E. Brockway.
 Weymouth, Andrew S. Thomson.
 Whitman, William C. Hobbs.
 Williamstown, Walter G. Mitchell.
 Winchendon, David B. Locke.
 Winchester, Henry M. Walradt.
 Winthrop, Frank A. Douglas.
 Woburn, Thomas Emerson.
 Worcester, Clarence F. Carroll.

MICHIGAN.

Adrian, P. J. Willson.
 Albion, W. J. McKone.
 Alpena, George A. Hunt.
 Ann Arbor, H. M. Slauson.
 Battle Creek, William G. Coburn.
 Bay City, John A. Stewart.
 Benton Harbor, Eugene A. Wilson.
 Big Rapids, James R. Miller.
 Cadillac, James Hamilton Kaye.
 Calumet, F. W. Cooley.
 Charlotte, M. R. Parmelee.
 Cheboygan, William C. Thompson.
 Coldwater, H. E. Johnson.
 Delray, Frank Cody.
 Detroit, Wales C. Martindale.
 Dowagiac, W. E. Conkling.
 Escanaba, William M. Jolliffe.
 Flint, R. H. Kirtland.
 Grand Haven, Edward P. Cummings.
 Grand Rapids, W. H. Elson.
 Hancock, Eugene La Rowe.
 Hillsdale, S. J. Gier.
 Holland, F. D. Haddock.
 Ionia, C. L. Bemis.
 Iron Mountain, L. E. Amidon.
 Ironwood, L. L. Wright.
 Ishpeming, G. T. Sweetland.
 Jackson, L. S. Norton.
 Kalamazoo, S. O. Hartwell.
 Lansing, Clarence E. Holmes.
 Ludington, Gerard T. Smith.

MICHIGAN—Continued.

Manistee, Samuel W. Baker.
 Manistique, J. J. Hoenberger.
 Marquette, E. C. Thompson.
 Marshall, Ralph S. Garwood.
 Menominee, B. S. Hopkins.
 Monroe, R. D. Briggs.
 Mount Clemens, J. B. Estabrook.
 Muskegon, David Mackenzie.
 Negaunee, Orr Schurtz.
 Niles, J. D. Schiller.
 Norway, E. P. Frost.
 Owosso, E. T. Austin.
 Petoskey, W. M. Andrews.
 Pontiac, R. B. Dean.
 Port Huron, W. F. Lewis.
 Saginaw:
 East Side, E. C. Warriner.
 West Side, N. A. Richards.
 St. Joseph, Ernest P. Clarke.
 Sault Ste. Marie, E. E. Ferguson.
 South Haven, A. D. Prentice.
 Traverse City, C. H. Horn.
 West Bay City, N. A. Richard.
 Wyandotte, George R. Brandt.
 Ypsilanti, Austin George.

MINNESOTA.

Albert Lea, E. M. Phillips.
 Austin, Andrew Nelson.
 Brainerd, John L. Torrens.
 Duluth, Robert E. Denfeld.
 Faribault, George A. Franklin.
 Fergus Falls, J. A. Vandyke.
 Little Falls, Alexander M. Rowe.
 Mankato, Edwin B. Uline.
 Minneapolis, Charles M. Jordan.
 New Ulm, E. T. Critchett.
 Owatonna, Walter V. Kasper.
 Red Wing, W. F. Kunze.
 Rochester, Lester S. Overholt.
 St. Cloud, Waite A. Shoemaker.
 St. Paul, Irven Leviston.
 St. Peter, V. R. Wasson.
 Stillwater, Darius Steward.
 Winona, J. A. Tormey.

MISSISSIPPI.

Biloxi, J. H. Owings.
 Columbus, Joe Cook.
 Greenville, E. E. Bass.
 Hattiesburg, F. B. Woodley.
 Jackson, Edward L. Bailey.
 McComb, Henry P. Hughes.
 Meridian, J. C. Fant.
 Natchez, J. W. Henderson.²
 Vicksburg, Charles Pendleton Kemper.

MISSOURI.

Boonville, William A. Annin.
 Brookfield, J. U. White.
 Cape Girardeau, E. E. McCullough.¹
 Cartersville, O. N. Waltz.

¹ Principal.² County superintendent.

II.—LIST OF CITY SUPERINTENDENTS—Continued.

MISSOURI—Continued.

Carthage, W. J. Stevens.
 Chillicothe, Oliver Stigall.
 Clinton, F. B. Owen.
 Columbia, R. H. Emberson.
 De Soto, A. B. Carroll.
 Fulton, J. C. Humphreys.
 Hannibal, R. B. D. Simonson.
 Independence, W. H. Johnson.
 Jefferson City, J. W. Richardson.
 Joplin, Joseph D. Elliff.
 Kansas City, James M. Greenwood.
 Kirksville, C. S. Brother.
 Lexington, C. A. Phillips.
 Louisiana, Elizabeth Whitaker.
 Macon, W. F. Jamison.
 Marshall, T. E. Spencer.
 Maryville, Benjamin F. Duncan.
 Mexico, D. A. McMillan.
 Moberly, J. A. Whiteford.
 Nevada, John C. Pike.
 Poplar Bluff, J. N. Street.
 Rich Hill, S. M. Barrett.
 St. Charles, George W. Jones.
 St. Joseph, Edward B. Neely.
 St. Louis, F. Louis Soldan.
 Sedalia, G. V. Buchanan.
 Springfield, Jonathan Fairbanks.
 Trenton, W. C. Ryan.
 Warrensburg, W. E. Morrow.
 Webb City, A. G. Young.

MONTANA.

Anaconda, J. A. Koontz.
 Butte, R. G. Young.
 Great Falls, S. D. Largent.
 Helena, Randall J. Condon.
 Missoula, Roscoe W. Beighle.

NEBRASKA.

Beatrice, W. L. Stevens.
 Fremont, J. L. Laird.
 Grand Island, Robert J. Barr.
 Hastings, J. D. French.
 Kearney, A. O. Thomas.
 Lincoln, C. H. Gordon.
 Nebraska City, Allen C. Fling.
 Omaha, Carroll G. Pearse.
 Plattsmouth, John G. McHugh.
 South Omaha, J. Arnott McLean.
 York, C. R. Atkinson.

NEVADA.

Reno, John Edwards Bray.

NEW HAMPSHIRE.

Berlin, H. W. Johnson.¹
 Concord (Union district), Louis J. Rundlett.
 Dover, Frank H. Pease.

NEW HAMPSHIRE—Continued.

Exeter, John A. Brown.²
 Franklin, O. A. Towne.¹
 Keene (Union district), Thaddeus William Harris.
 Laconia, J. H. Blaisdell.
 Manchester, C. W. Bickford.
 Nashua, James H. Fassett.
 Portsmouth, H. C. Morrison.
 Rochester, E. L. Silver.
 Somersworth, Elisha C. Andrews.³

NEW JERSEY.

Asbury Park, Fred S. Shepherd.
 Atlantic City, Charles B. Boyer.
 Bayonne, James H. Christie.
 Bloomfield, William E. Chancellor.
 Bordentown, William Macfarland.⁴
 Bridgeton, E. J. Hitchner.
 Burlington, Wilbur Watts.⁵
 Camden, Martin V. Bergen.
 Dover, J. Howard Hulsart.⁴
 East Orange, Vernon L. Davey.
 Elizabeth, William J. Shearer.
 Englewood, Marcellus Oakey.
 Gloucester, Orville P. De Witt.⁶
 Hackensack, John Terhune.⁷
 Harrison, John Dwyer.
 Hoboken, A. J. Demarest.
 Irvington, F. H. Morrell.
 Jersey City, Henry Snyder.
 Kearney, Don C. Bliss.⁵
 Lambertville, Robert H. Dilts.
 Long Branch, Christopher Gregory.
 Millville, Silas C. Smith.
 Montclair, Randall Spaulding.
 Morristown, W. L. R. Haven.
 Newark, Addison B. Poland.
 New Brunswick, William Clinton Armstrong.
 Newton, Charles J. Majory.⁴
 North Plainfield, H. J. Wightman.
 Orange, William M. Swingle.
 Passaic, F. E. Spaulding.
 Paterson, L. A. Goodenough.
 Perth Amboy, S. E. Shull.
 Phillipsburg, H. Budd Howell.
 Plainfield, Henry M. Maxson.
 Rahway, W. O. Robinson.
 Red Bank, S. V. Arrowsmith.
 Salem, Morris H. Stratton.
 Somerville, H. C. Krebs.
 South Amboy, R. M. Fitch.
 South Orange, H. W. Foster.
 Summit, John K. Lathrop.
 Trenton, Leslie C. Pierson.
 Union, Otto Ortel.⁵
 Vineland, J. J. Unger.
 West Hoboken, Robert Waters.
 West Orange, Edward D. McCollom.
 Woodbury, J. E. Frey.⁴

¹ Chairman of school board.² Clerk school board.³ Secretary school board.⁴ Supervising principal.⁵ Principal.⁶ Supervisor.⁷ County superintendent.⁸ Post-office, Arlington.⁹ Post-office, Weehawken.

II.—LIST OF CITY SUPERINTENDENTS—Continued.

NEW MEXICO.

Albuquerque, M. E. Hickey.
Santa Fe, J. A. Wood.

NEW YORK.

Albany, Charles W. Cole.
Albion, Willis G. Carmer.
Amsterdam, H. T. Morrow.
Auburn, Clinton S. Marsh.
Batavia, John Kennedy.
Bath, W. F. Palmer.¹
Binghamton, Darwin L. Bardwell.
Buffalo, Henry P. Emerson.
Canandaigua, J. Carlton Norris.
Catskill, Thomas A. Caswell.
Cohoes, George E. Dixon.
Corning, Leigh R. Hunt.
Cortland, Ferdinand E. Smith.
Dunkirk, John W. Babcock.
Elmira, C. F. Walker.
Fredonia, George G. Miner.²
Fulton, B. G. Clapp.
Geneva, William H. Truesdale.
Glens Falls, E. W. Griffith.
Gloversville, James A. Estee.
Green Island, James Heatley.
Haverstraw, L. O. Markham.
Herkimer, A. J. Merrell.
Hoosick Falls, H. H. Snell.
Hornellsville, Elmer S. Redman.
Hudson, F. J. Sagendorph.
Ilion, Alfred W. Abrams.
Ithaca, F. D. Boynton.
Jamestown, Rovillus R. Rogers.
Johnstown, Frank W. Jennings.
Kingston:
 District No. 5, Kingston school district,
 Charles M. Ryon.
 District No. 1, P. H. Cullen¹ (post-office,
 Rondout).
 District No. 2, ———.
 District No. 3, Henry Powers¹ (post-office,
 Rondout).
 District No. 4, William A. McConnell¹ (post-
 office, Rondout).
Lansingburg, George F. Sawyer.
Little Falls, Harry E. Reed.
Lockport, Emmet Belknap.
Lyons, W. H. Kinney.
Malone, Sarah L. Perry.
Mamaroneck, Samuel J. Preston.
Matteawan, Gurdon R. Miller.¹
Mechanicsville, L. B. Blakeman.
Medina, T. H. Armstrong.
Middletown, James F. Tuthill.
Mount Vernon, Charles E. Nichols.
Newark, Charles A. Hamilton.¹
Newburg, James M. Crane.
New Rochelle, Isaac E. Young.

NEW YORK—Continued.

New York:
 William H. Maxwell,³ city superintendent.
 Boroughs of Manhattan and the Bronx,
 John Jasper.³
 Borough of Brooklyn, John H. Walsh.⁴
 Borough of Queens, Edward L. Stevens.⁵
 Borough of Richmond, Hubbard R. Yet-
 man.⁶
Niagara Falls, Nathaniel L. Benham.
North Tonawanda, Frank J. Beardsley.
Norwich, Stanford J. Gibson.
Nyack, Ira H. Lawton.
Ogdensburg, Barney Whitney.
Olean, Fox Holden.
Oneida, Avery Warner Skinner.
Oneonta, William C. Franklin.
Ossining, J. Irving Gorton.
Oswego, George E. Bullis.
Owego, H. B. Tilbury.
Peekskill:
 District No. 7 (Drumhill), John Millar.
 District No. 8 (Oakside), A. D. Dunbar.
Penn Yan, Jay Crissey.
Plattsburg, F. H. Davis.
Port Chester, E. G. Lautman.
Port Jervis, John M. Dolph.
Poughkeepsie, Edwin Schuyler Harris.
Rensselaer, R. W. Wickham.
Rochester, Charles B. Gilbert.
Rome, Walter D. Hood.
Salamanca, Thomas Stone Bell.
Sandy Hill, Frances A. Tefft.
Saratoga Springs, Thomas R. Kneil.
Schenectady, Samuel B. Howe.
Seneca Falls, C. Willard Rice.
Syracuse, A. B. Blodgett.
Tarrytown, Albert W. Emerson.
Tonawanda, F. J. Diamond.
Troy, John H. Willets.
Utica, George Griffith.
Waterloo, H. T. Skerritt.
Watertown, Frank S. Tisdale.
Watervliet, J. Edman Massee.
Waverly, H. J. Walter.
Whitehall, Wilber W. Howe.
White Plains, Sylvester R. Shear.
Yonkers, Charles E. Gorton.

NORTH CAROLINA.

Asheville, R. J. Tighe.
Charlotte, R. B. Hunter.
Concord, C. S. Coler.
Durham, J. A. Matheson.
Fayetteville, B. C. McIver.
Gastonia, John F. Bradley.
Goldsboro, J. I. Foust.
Greensboro, G. A. Grimsley.
High Point, George H. Crowell.
Newbern, H. P. Harding.

¹ Principal.² President board of education.³ Post-office, New York City.⁴ Post-office, Brooklyn, N. Y.⁵ Post-office, Flushing, N. Y.⁶ Post-office, Tottenville, N. Y.

II.—LIST OF CITY SUPERINTENDENTS—Continued.

NORTH CAROLINA—Continued.

Raleigh, C. H. Mebane.
 Salisbury, Charles L. Coon.
 Washington, Harry Howell.
 Wilmington, ————
 Winston, C. F. Tomlinson.

NORTH DAKOTA.

Fargo, F. Everett Smith.
 Grand Forks, J. Nelson Kelley.

OHIO.

Akron, Henry V. Hotchkiss.
 Alliance, John E. Morris.
 Ashland, W. S. Robinson.
 Ashtabula, J. S. Lowe.
 Barberton, W. M. Glasgow.
 Bellaire, J. R. Anderson.
 Bellefontaine, ————
 Bellevue, E. F. Warner.
 Bucyrus, J. J. Bliss.
 Cambridge, C. L. Cronebaugh.
 Canton, J. M. Sarver.
 Chillicothe, N. H. Chaney.
 Cincinnati, Richard G. Boone.
 Circleville, C. L. Boyer.
 Cleveland, Lewis H. Jones.
 Columbus, J. A. Shawan.
 Conneaut, Jay F. Ullery.
 Coshocton, H. S. Piatt.
 Dayton, W. N. Hailmann.
 Defiance, R. W. Mitchell.
 Delaware, Horace A. Stokes.
 Delphos, G. W. Lewis.
 East Liverpool, Robert E. Rayman.
 Elyria, W. R. Comings.
 Findlay, J. W. Zellar.
 Fostoria, W. S. Robinson.
 Fremont, W. W. Ross.
 Galion, I. C. Guinther.
 Gallipolis, Charles J. Britton.
 Glenville, H. H. Cully.
 Greenville, Edward M. Van Cleave.
 Hamilton, S. L. Rose.
 Hillsboro, H. C. Minnich.
 Ironton, S. P. Humphrey.
 Jackson, J. E. Kinnison.
 Kent, A. B. Stutzman.
 Kenton, E. P. Dean.
 Lancaster, George W. Welsh.
 Lima, Charles C. Miller.
 Lorain, F. D. Ward.
 Mansfield, Edmund D. Lyon.
 Marietta, Henry G. Williams.
 Marion, Arthur Powell.
 Martins Ferry, W. H. Stewart.
 Massillon, Edmund A. Jones.
 Middletown, J. E. McKean.
 Mount Vernon, John K. Baxter.
 Nelsonville, Aaron Grady.
 Newark, F. Martin Townsend.
 New Philadelphia, G. C. Maurer.

OHIO—Continued.

Niles, Frank J. Roller.
 Norwalk, A. D. Beechy.
 Norwood, W. S. Cadman.
 Oberlin, E. A. Miller.
 Painesville, W. W. Boyd.
 Piqua, C. W. Bennett.
 Pomeroy, T. C. Flanegin.
 Portsmouth, J. I. Hudson.
 St. Mary's, J. D. Simkins.
 Salem, Jesse L. Johnson.
 Sandusky, H. B. Williams.
 Shelby, W. S. Lynch.
 Sidney, E. Hard.
 Springfield, John S. Weaver.
 Steubenville, Arthur Powell.
 Tiffin, C. A. Krout.
 Toledo, William Wallace Chalmers.
 Troy, Charles L. Van Cleave.
 Uhrichsville, L. E. Everett.
 Urbana, I. N. Keyser.
 Van Wert, J. P. Sharkey.
 Warren, C. E. Carey.
 Washington C. H., H. R. McVay.
 Wellston, Ezekiel Wallace Patterson.
 Wellsville, James L. MacDonald.
 Wooster, Charles Haupt.
 Xenia, Edwin B. Cox.
 Youngstown, F. Trendley.
 Zanesville, W. D. Lash.

OKLAHOMA.

Guthrie, James R. Campbell.
 Oklahoma, B. F. Nihart.

OREGON.

Astoria, A. L. Clark.
 Portland, Frank Rigler.
 Salem, D. W. Yoder.

PENNSYLVANIA.

Allegheny, John Morrow.
 Allentown, Francis D. Raub.
 Altoona, D. S. Keith.
 Archbald, J. C. Taylor.
 Ashland, William C. Estler.
 Ashley, T. B. Harrison.
 Bangor, Wm. H. Lindeman.
 Beaver Falls, Charles J. Boak.
 Bellefonte, David O. Etters.
 Bethlehem, Fred W. Robbins.
 Braddock, Geo. H. Lamb.
 Bradford, E. E. Miller.
 Bristol, Louise D. Baggs.
 Butler, John A. Gibson.
 Carbondale, Elmer E. Garr.
 Carlisle, I. L. Bryner.
 Carnegie, W. S. Bryan.¹
 Chambersburg, Samuel Gelwix.
 Charleroi, J. A. Snodgrass.
 Chester, A. Duncan Yocum.
 Columbia, Daniel Fleisher.

¹ Principal.

II.—LIST OF CITY SUPERINTENDENTS—Continued.

PENNSYLVANIA—Continued.

Connellsville, J. P. Wiley.
 Conshohocken, J. Horace Landis.
 Corry, A. D. Colegrove.
 Danville, U. L. Gordy.
 Dickson City, M. J. Lloyd.
 Dubois, W. L. Greene.
 Dunmore, E. D. Bovard.
 Duquesne, A. V. McKee.¹
 Easton, William W. Cottingham.
 Edwardsdale, J. O. Hermann.
 Erie, H. C. Missimer.
 Etna, J. Q. A. Irvine.¹
 Forest City, C. T. Thorpe.¹
 Franklin, N. P. Kinsley.
 Greensburg, A. M. Wyant.
 Greenville, A. H. Wright.
 Hanover, Thomas F. Chrostwaite.
 Harrisburg, Lemuel O. Foose.
 Hazleton, David A. Harman.
 Homestead, John C. Kendall.
 Huntingdon, Kimber Cleaver.
 Indiana, W. S. Trainer.
 Jeannette, John W. Anthony.
 Johnstown, J. M. Berkey.
 Kane, J. E. Henretta.
 Lancaster, R. K. Buehrle.
 Lansford, E. M. Balsbaugh.²
 Latrobe, A. A. Streng.
 Lebanon, R. T. Adams.
 Lehigh, A. L. Custer.
 Lock Haven, John A. Robb.
 McKeesport, H. F. Brooks.
 McKees Rocks, F. H. Powers.
 Mahanoy City, William N. Ehrhart.
 Mauch Chunk, James J. Bevan.
 Meadville, U. G. Smith.
 Middletown, H. J. Wickey.
 Millville, S. J. Johnston.¹
 Milton, A. Reist Rutt.
 Minersville, H. H. Spayd.¹
 Monongahela City, E. W. Dalbey.¹
 Mount Carmel, Samuel Halsey Dean.
 Mount Pleasant, S. Grant Miller.
 Nanticoke, John William Griffith.
 New Brighton, Joseph Burdette Richay.
 New Castle, J. W. Canon.
 New Kensington, B. S. Hunnell.
 Norristown, Joseph K. Gotwals.
 Oil City, C. A. Babcock.
 Olyphant, M. W. Cumming.²
 Philadelphia, Edward Brooks.
 Phoenixville, Harry F. Leister.
 Pittsburg, Samuel Andrews.
 Pittston, Robert Shiel.²
 Plymouth, Frank E. Pickinger.
 Pottstown, William W. Rupert.
 Pottsville, B. F. Patterson.
 Punxsutawney, James L. Allison.²
 Reading, E. Mackey.

PENNSYLVANIA—Continued.

Renovo, James W. Elliott.
 Rochester, Rufus Darr.
 St. Clair, Thomas G. Jones.
 St. Marys, J. W. Sweeney.
 Sayer, J. F. Stetler.
 Scottdale, B. S. Fox.
 Scranton, George Howell.
 Shamokin, Joseph Howerth.
 Sharon, D. F. Grier.
 Sharpsburg, C. C. Kelso.²
 Shenandoah, J. W. Cooper.
 South Bethlehem, Owen R. Wilt.
 Steelton, L. E. McGinnes.
 Sunbury, Ira Shipman.
 Tamaqua, Robert F. Ditchburn.
 Tarentum, Charles Edwin Carter.
 Titusville, Henry Pease.
 Towanda, H. G. Padget.²
 Tyrone, I. C. M. Ellenberger.
 Uniontown, Lee Smith.
 Warren, W. L. MacGowan.
 Washington, W. D. Brightwell.
 Waynesboro, J. H. Reber.
 West Chester, Addison L. Jones.
 West Pittston, L. P. Bierly.
 Wilkesbarre, James M. Coughlin.
 Wilkinsburg, E. J. Shives.
 Williamsport, Charles Lose.
 Wilmerding, Samuel Hamilton.³
 York, Atreus Wanner.

RHODE ISLAND.

Bristol, John Post Reynolds.
 Burrillville, Allen P. Keith.⁴
 Central Falls, Wendell A. Mowry.
 Coventry, Charles M. Tyler.
 Cranston, Valentine Almy.
 Cumberland, Albert E. Kingsbury.
 East Providence, George N. Bliss.
 Johnston, William H. Starr.⁵
 Lincoln, Frederick E. Bragdon.
 Newport, Herbert Warren Lull.
 North Kingston, F. B. Cole.⁶
 Pawtucket, Henry D. Hervey.
 Providence, W. H. Small.
 South Kingston, B. E. Helme.⁷
 Warren, Alva E. Carpenter.
 Warwick, C. Edward Glover.
 Westerly, C. H. Babcock.
 Woonsocket, Frank E. McFee.

SOUTH CAROLINA.

Anderson, Thomas C. Walton.
 Beaufort, Frank T. Harder.
 Charleston, Henry P. Archer.
 Chester, W. H. Hand.
 Columbia, E. S. Dreher.
 Georgetown, Ellison Capers, jr.
 Greenville, E. L. Hughes.

¹ Principal.² Supervising principal.³ County superintendent.⁴ Post-office, Pascoag.⁵ Post-office, Centerdale.⁶ Post-office, Wickford.⁷ Post-office, Kingston.

II.—LIST OF CITY SUPERINTENDENTS—Continued.

SOUTH CAROLINA—Continued.

Greenwood, Edward C. Coker.
Laurens, B. L. Jones.
Orangeburg, A. J. Thackston.
Spartanburg, Frank Evans.
Sumter, S. H. Edmunds.

SOUTH DAKOTA.

Aberdeen, E. T. Fitch.
Lead, E. C. Grubbs.
Mitchell, E. J. Quigley.
Sioux Falls, Frank C. McClelland.
Yankton, C. W. Martindale.

TENNESSEE.

Bristol, L. S. London.
Chattanooga, A. T. Barrett.
Clarks ville, J. W. Graham.
Columbia, W. E. Bostick and J. B. Kelly.¹
Jackson, Seymour A. Mynders.
Johnson City, J. E. Crouch.
Knoxville, Albert Ruth.
Memphis, George W. Gordon.
Nashville, Z. H. Brown.

TEXAS.

Austin, T. G. Harris, I. W. Evans.
Bonham, I. W. Evans.
Brenham, Edward W. Tarrant.
Brownsville, Thomas P. Barbour.²
Cleburne, V. M. Fulton.
Corpus Christi, Charles W. Crossley.
Corsicana, H. S. Melear.
Dallas, J. L. Long.
Denison, J. E. Blair.
Denton, J. S. Carlisle.
El Paso, G. P. Putnam.
Ennis, H. F. Triplett.
Fort Worth, M. G. Bates.
Gainesville, E. F. Comegys.
Galveston, John W. Hopkins.
Gonzales, T. L. Toland.
Greenville, J. H. Van Amburgh.
Hillsboro, T. S. Cox.
Houston, W. W. Barnett.
Laredo, S. J. Christen.
McKinney, F. D. Shepherd.
Marshall, W. H. Attebery.
Palestine, D. C. Lake.
Paris, J. G. Wooten.
San Antonio, Thomas M. Colston.
Sherman, P. W. Horn.
Taylor, W. M. Williams.
Temple, Justin F. Kimball.
Terrell, S. M. N. Marrs.
Texarkana, W. Owens.
Tyler, J. L. Henderson.
Victoria, Felix E. Smith.
Waco, J. C. Lattimore.
Waxahachie, Walter Acker.
Weatherford, H. C. Reed.

UTAH.

Logan, Albert M. Merrill.
Ogden, William Allison.

UTAH—Continued.

Provo, William S. Rawlings.
Salt Lake City, D. H. Christensen.

VERMONT.

Barre, O. D. Mathewson.
Bellows Falls, Everett W. Lord.
Bennington, Charles L. Simmons.
Brattleboro, H. K. Whitaker.
Burlington, Henry O. Wheeler.
Montpelier, Walter E. Ranger.
Rutland, Willard A. Frasier.
St. Albans, Francis A. Bagnall.
St. Johnsbury, Clarence H. Dempsey.

VIRGINIA.

Alexandria, Kosciusko Kemper.
Bristol, E. H. Russell.
Charlottesville, John S. Patton.
Danville, Abner Anderson.
Fredericksburg, Benjamin P. Willis.
Lynchburg, E. C. Glass.
Manchester, David L. Pulliam.
Newport News, John Sheldon Jones.
Norfolk, Richard A. Dobie.
Petersburg, D. M. Brown.
Portsmouth, John C. Ashton.
Richmond, William F. Fox.
Roanoke, Bushrod Rust.
Staunton, John H. Bader.
Winchester, Maurice M. Lynch.

WASHINGTON.

Ballard, J. C. Dickson.
Everett, George E. St. John.
Fairhaven, W. J. Hughes.
New Whatcom, E. E. White.
Olympia, C. W. Durette.
Seattle, Frank B. Cooper.
Spokane, J. F. Saylor.
Tacoma, Reuben S. Bingham.
Vancouver, C. W. Shumway.
Walla Walla, F. M. Burke.

WEST VIRGINIA.

Benwood, Charles E. Carrigan.²
Bluefield, C. A. Fulwider.
Charleston, George S. Laidley.
Clarksburg, F. L. Burdette.
Grafton, Hayward Fleming.
Huntington, W. H. Cole.
Martinsburg, C. H. Cole.
Moundsville, D. T. Williams.
Parkersburg, U. S. Fleming.
Wheeling, W. H. Anderson.

WISCONSIN.

Antigo, F. F. Showers.
Appleton, Carrie E. Morgan.
Ashland, J. T. Hooper.
Baraboo, H. A. Whipple.
Beaver Dam, W. C. Griffiths.
Beloit, Franklin E. Converse.
Berlin, J. E. Murphy.
Chippewa Falls, S. B. Tobey.

¹ Principals.² Principal.

II.—LIST OF CITY SUPERINTENDENTS—Continued.

WISCONSIN—Continued.

Depere:

East Side, Andrew C. Mailer.

West Side, J. D. Conley.

Eau Claire, Otis C. Gross.

Fond du Lac, Myron E. Keats.

Grand Rapids, George P. Hambrecht.

Green Bay, A. W. Burton.

Janesville, H. C. Buell.

Kaukauna, E. A. Baker.

Kenosha, Norman L. Baker.

La Crosse, John P. Bird.

Madison, R. B. Dudgeon.

Manitowoc, Fred. Christiansen.¹

Marinette, John T. Edwards.

Menasha, John Callahan.

Menominee, Judson E. Hoyt.

Merrill, W. H. Schulz.

Milwaukee, H. O. R. Siefert.

Neenah, Jennie S. Cooke.

WISCONSIN—Continued.

Oconto, R. L. Cooley.

Oshkosh, H. A. Simonds.

Portage, A. C. Kellogg.

Racine, George F. Bell.

Rhineland, Myra Germond.

Sheboygan, H. F. Leverenz.

Stevens Point, J. W. Simmons.

Superior, B. B. Jackson.

Washburn, D. E. Cameron.

Watertown, Charles F. Viebahn.

Waukesha, H. L. Terry.²

Wausau, Karl Mathie.

West Green Bay, A. W. Burton.

WYOMING.

Cheyenne, James O. Churchill.

Laramie, Frank W. Lee.

Rock Springs, B. A. Dunbar.

III.—COLLEGE PRESIDENTS.

I.—Colleges for men and coeducational colleges of liberal arts.

Name of president.	University or college.	Address.
Frank M. Roof, A. M.	Howard College	East Lake, Ala.
Rev. S. M. Hosmer, D. D.	Southern University	Greensboro, Ala.
James H. Riddle, Ph. M.	Hartselle College	Hartselle, Ala.
J. P. Neff, M. S.	Lafayette College	Lafayette, Ala.
Rev. Benedict Menges, O. S. B.	St. Bernard College	St. Bernard, Ala.
Rev. C. S. Dinkins	Alabama Baptist Colored University	Selma, Ala.
Rev. William Tyrrell, S. J.	Spring Hill College	Spring Hill, Ala.
John W. Abercrombie, LL. D.	University of Alabama	University, Ala.
M. M. Parker, A. M.	University of Arizona	Tucson, Ariz.
G. C. Jones, A. M.	Arkadelphia Methodist College	Arkadelphia, Ark.
John W. Conger, A. M.	Ouachita Baptist College	Do.
Eugene R. Long, Ph. D.	Arkansas College	Batesville, Ark.
F. R. Earle	Arkansas Cumberland College	Clarksville, Ark.
Rev. A. C. Millar, A. M.	Hendrix College	Conway, Ark.
J. L. Buchanan, LL. D.	University of Arkansas	Fayetteville, Ark.
Rev. J. M. Cox, D. D.	Philander Smith College	Little Rock, Ark.
.....	Mountain Home College	Mountain Home, Ark.
B. I. Wheeler, Ph. D., LL. D.	University of California	Berkeley, Cal.
Rev. George A. Gates, D. D.	Pomona College	Claremont, Cal.
Rev. G. W. Wadsworth, A. B.	Occidental College	Los Angeles, Cal.
Rev. J. S. Glass, C. M., D. D.	St. Vincent's College	Do.
William T. Randall, A. M., dean.	University of Southern California	Do.
Rev. T. G. Brownson, D. D.	California College	Oakland, Cal.
Walter A. Edwards, A. M.	Throop Polytechnic Institute	Pasadena, Cal.
Rev. John P. Frieden, S. J.	St. Ignatius College	San Francisco, Cal.
Rev. Eli McClish, D. D.	University of the Pacific	San Jose, Cal.
Rev. Robert E. Kenna, S. J.	Santa Clara College	Santa Clara, Cal.
G. H. Wilkinson, Ph. B.	Pacific Methodist College	Santa Rosa, Cal.
D. S. Jordan, Ph. D., LL. D.	Leland Stanford Junior University	Stanford University, Cal.
James H. Baker, LL. D.	University of Colorado	Boulder, Colo.
Rev. W. F. Slocum, LL. D.	Colorado College	Colorado Springs, Colo.
Rev. J. J. Brown, S. J.	College of the Sacred Heart	Denver, Colo.
Rev. Henry A. Buchtel, D. D., chancellor.	University of Denver	University Park, Colo.
Rev. G. W. Smith, D. D., LL. D.	Trinity College	Hartford, Conn.
Rev. B. P. Raymond, D. D., LL. D.	Wesleyan University	Middletown, Conn.
Arthur T. Hadley, LL. D.	Yale University	New Haven, Conn.
Rev. W. C. Jason, A. M., B. D.	State College for Colored Students	Dover, Del.
Geo. A. Harter, Ph. D.	Delaware College	Newark, Del.
Rev. T. J. Conaty, S. T. D., rector.	Catholic University of America	Washington, D. C.
Charles W. Needham, LL. D.	Columbian University	Do.
E. M. Gallaudet, Ph. D., LL. D.	Gallaudet College	Do.
Rev. Jerome Daugherty, S. J.	Georgetown University	Do.

¹ County superintendent.² Principal.

III—COLLEGE PRESIDENTS—Continued.

I.—Colleges for men and coeducational colleges of liberal arts—Continued.

Name of president.	University or college.	Address.
Rev. Edward X. Fink, S. J.	Gonzaga College	Washington, D. C.
Rev. J. E. Rankin, D. D., LL. D.	Howard University	Do.
Rev. Brother Abbas, F. S. C.	St. John's College	Do.
John F. Forbes, Ph. D.	John B. Stetson University	Deland, Fla.
Thos. H. Taliaferro, Ph. D.	Florida Agricultural College	Lake City, Fla.
Rev. Charles H. More, Ph. D.	St. Leo Military College	St. Leo, Fla.
A. A. Murphree, A. B.	Florida State College	Tallahassee, Fla.
Rev. G. M. Ward, D. D.	Rollins College	Winter Park, Fla.
Walter B. Hill, LL. D., chancellor	University of Georgia	Athens, Ga.
Rev. George Sale, A. M.	Atlanta Baptist College	Atlanta, Ga.
Rev. Horace Bumstead, D. D.	Atlanta University	Do.
Rev. J. M. Henderson, D. D.	Morris Brown College	Do.
J. P. W. Brouse, A. M., C. E.	Bowdon College	Bowdon, Ga.
Joseph S. Stewart, A. M.	North Georgia Agricultural College	Dahlonega, Ga.
P. D. Pollock, LL. D.	Mercer University	Macon, Ga.
Rev. C. E. Dowman, D. D.	Emory College	Oxford, Ga.
Rev. C. M. Melden, Ph. D.	Clark University	South Atlanta, Ga.
Charles A. Bell	Nannie Lou Warthen Institute	Wrightsville, Ga.
Rev. Joseph A. Sharp, A. B.	Young Harris College	Young Harris, Ga.
James A. MacLean, Ph. D.	University of Idaho	Moscow, Idaho.
Rev. Ulric Z. Gilmer, D. D.	Hedding College	Abingdon, Ill.
Rev. E. M. Smith, D. D.	Illinois Wesleyan University	Bloomington, Ill.
Rev. M. J. Marsile, C. S. V.	St. Viator's College	Bourbonnais, Ill.
W. H. Bradley, A. M., chairman	Blackburn University	Carlinville, Ill.
Rev. Fred L. Sigmund, D. D.	Carthage College	Carthage, Ill.
Andrew S. Draper, LL. D.	University of Illinois	Champaign, Ill.
Rev. Henry J. Dumbach, S. J.	St. Ignatius College	Chicago, Ill.
Rev. John Krusynski, C. R.	St. Stanislaus College	Do.
Rev. Wm. E. Harper, Ph. D., D. D., LL. D.	University of Chicago	Do.
W. E. Lugenbeel, Ph. D.	Austin College	Eflingham, Ill.
Rev. Daniel Irion	Evangelical Proseminary	Elmhurst, Ill.
Robert E. Hieronymus, A. M.	Eureka College	Eureka, Ill.
Edmund J. James, Ph. D.	Northwestern University	Evanston, Ill.
Rev. J. A. Leavitt, D. D.	Ewing College	Ewing, Ill.
J. E. Bittinger, A. M.	Northern Illinois College	Fulton, Ill.
Rev. Thomas McClelland, D. D.	Knox College	Galesburg, Ill.
Rev. Charles E. Nash, S. T. D.	Lombard College	Do.
Wilson T. Hogg, Ph. B.	Greenville College	Greenville, Ill.
Rev. Clifford W. Barnes, A. M.	Illinois College	Jacksonville, Ill.
Rev. Richard D. Harlan	Lake Forest University	Lake Forest, Ill.
M. H. Chamberlin, LL. D.	McKendree College	Lebanon, Ill.
Rev. J. L. Goodknight, D. D.	Lincoln College	Lincoln, Ill.
John H. McMillan, Litt. D.	Monmouth College	Monmouth, Ill.
Rev. H. J. Kiekhoefer, Ph. D.	Northwestern College	Naperville, Ill.
Rev. Alexius Grass, O. S. B., rector	St. Bede College	Peru, Ill.
Rev. N. Leonard, O. S. F., rector	St. Francis Solanus College	Quincy, Ill.
Gustav A. Andreen, Ph. D.	Augustana College	Rock Island, Ill.
Rev. H. Storff, O. S. F., rector	St. Joseph's Diocesan College	Teutopolis, Ill.
Rev. Stanley A. McKay, D. D.	Shurtleff College	Upper Alton, Ill.
Rev. Wm. S. Reese, D. D.	Westfield College	Westfield, Ill.
Rev. C. A. Bianchard, D. D.	Wheaton College	Wheaton, Ill.
Rev. Wm. P. Kane, D. D.	Indiana University	Bloomington, Ind.
Rev. Jos. Schmidt	Wabash College	Crawfordsville, Ind.
Rev. William T. Stott, D. D., LL. D.	Concordia College	Fort Wayne, Ind.
Rev. H. A. Gobin, D. D.	Franklin College	Franklin, Ind.
Rev. D. W. Fisher, D. D., LL. D.	De Pauw University	Greencastle, Ind.
Scot Butler, LL. D.	Hanover College	Hanover, Ind.
Rev. L. J. Aldrich, D. D.	Butler College	Irvington, Ind.
Rev. C. W. Lewis, C. D.	Union Christian College	Merom, Ind.
Rev. A. Morrissey, C. S. C.	Moore's Hill College	Moore's Hill, Ind.
Joseph J. Mills, LL. D.	University of Notre Dame	Notre Dame, Ind.
Rev. A. Schmitt, O. S. B.	Earlham College	Richmond, Ind.
Rev. T. C. Reade, D. D.	St. Meinrad College	St. Meinrad, Ind.
J. H. Scott, A. B.	Taylor University	Upland, Ind.
Rev. A. Grant Evans	Indian University	Bacone, Ind. T.
Rev. S. B. McCormick, D. D.	Henry Kendall College	Muscogee, Ind. T.
J. Frederick Hirsch, A. M.	Coe College	Cedar Rapids, Iowa.
O. Kraushaar	Charles City College	Charles City, Iowa.
Rev. J. C. Calhoun, D. D.	Wartburg College	Clinton, Iowa.
Rev. Laur. Larsen	Amity College	College Springs, Iowa.
Rev. George D. Adams, A. M.	Luther College	Decorah, Iowa.
Rev. Wm. B. Craig, D. D., LL. D., chancellor	Des Moines College	Des Moines, Iowa.
Rev. John P. Carroll, D. D.	Drake University	Do.
Rev. F. W. Hinit, Ph. D.	St. Joseph's College	Dubuque, Iowa.
Rev. Dan F. Bradley, D. D.	Parsons College	Fairfield, Iowa.
Andrew G. Wilson, A. M.	Upper Iowa University	Fayette, Iowa.
	Iowa College	Grinnell, Iowa.
	Lenox College	Hopkinton, Iowa.

III.—COLLEGE PRESIDENTS—Continued.

I.—Colleges for men and coeducational colleges of liberal arts—Continued.

Name of president.	University or college.	Address.
Charles E. Shelton, A. M.	Simpson College	Indianola, Iowa.
Geo. E. MacLean, Ph. D., LL. D.	State University of Iowa	Iowa City, Iowa.
Herbert S. Salisbury, B. S.	Graceland College	Lamoni, Iowa.
Carlyle Summerbell, A. M.	Palmer College	LeGrand, Iowa.
Rev. E. S. Havighorst, D. D.	German College	Mount Pleasant, Iowa.
Rev. John W. Hancher, S. T. D.	Iowa Wesleyan University	Do.
Rev. Wm. F. King, D. D., LL. D.	Cornell College	Mount Vernon, Iowa.
A. Rosenberger, A. B., LL. B.	Penn. College	Oskaloosa, Iowa.
L. A. Garrison, A. B., vice pres.	Central University of Iowa	Pella, Iowa.
Rev. W. S. Lewis, D. D.	Morningside College	Sioux City, Iowa.
Rev. E. E. Reed, A. M.	Buena Vista College	Storm Lake, Iowa.
Rev. J. Gordon, D. D., acting	Tabor College	Tabor, Iowa.
Rev. L. Bookwalter, D. D.	Western College	Toledo, Iowa.
Rev. Jacob A. Clutz, D. D.	Midland College	Atchison, Kans.
Rev. I. Wolf, O. S. B., D. D.	St. Benedict's College	Do.
Rev. L. H. Murlin, D. D.	Baker University	Baldwin, Kans.
Rev. E. H. Vaughan, Ph. D., D. D.	Soule College	Dodge City, Kans.
Rev. J. C. Miller, D. D.	College of Emporia	Emporia, Kans.
Amos A. Davis, A. M.	Highland University	Highland, Kans.
E. N. Johnson, A. M., C. E.	Campbell University	Holton, Kans.
Rev. D. S. Stephens, D. D., chancellor.	Kansas City University	Kansas City, Kans.
Frank Strong, Ph. D.	University of Kansas	Lawrence, Kans.
Rev. J. D. Droke, D. D.	Lane University	Lecompton, Kans.
T. W. Bellingham, Ph. D.	Kansas Christian College	Lincoln, Kans.
Rev. C. A. Swenson, Ph. D., D. D.	Bethany College	Lindsborg, Kans.
J. D. S. Riggs, Ph. D., LL. H. D.	Ottawa University	Ottawa, Kans.
Rev. James McCabe, S. J.	St. Mary's College	St. Marys, Kans.
Rev. Milton E. Phillips, D. D.	Kansas Wesleyan University	Salina, Kans.
Rev. F. M. Spencer, D. D.	Cooper Memorial College	Sterling, Kans.
	Washburn College	Topeka, Kans.
Rev. N. J. Morrison, D. D., LL. D.	Fairmount College	Winfield, Kans.
Rev. A. W. Meyer	St. John's Lutheran College	Do.
Rev. Frederic C. Demorest, D. D.	Southwest Kansas College	Barbourville, Ky.
Rev. J. P. Faulkner, A. M.	Union College	Berea, Ky.
Rev. Wm. G. Frost, Ph. D.	Berea College	Bowling Green, Ky.
Wm. A. Obenchain, A. M.	Ogden College	Danville, Ky.
Rev. Wm. C. Roberts, D. D., LL. D.	Central University of Kentucky	Georgetown, Ky.
Rev. Baron D. Gray, D. D.	Georgetown College	Glasgow, Ky.
Rev. J. H. Burnett, A. M.	Liberty College	Hopkinsville, Ky.
A. C. Kuykendall, A. B.	South Kentucky College	Lexington, Ky.
Rev. Burris A. Jenkins, A. M., B. D.	Kentucky University	Do.
J. K. Patterson, Ph. D., LL. D.	State College of Kentucky	Russellville, Ky.
Rev. E. S. Alderman, D. D.	Bethel College	St. Marys, Ky.
Rev. David Fennessy, C. E.	St. Mary's College	Winchester, Ky.
Rev. John L. Weber, D. D.	Kentucky Wesleyan College	Baton Rouge, La.
Thomas D. Boyd, LL. D.	Louisiana State University	Convent, La.
Rev. M. Thouvenin, S. M.	Jefferson College	Jackson, La.
Rev. I. W. Cooper, D. D.	Centenary College of Louisiana	New Orleans, La.
Rev. John Erisian, S. J.	College of the Immaculate Conception.	Do.
R. W. Perkins, Ph. D.	Leland University	Do.
Frederic H. Knight, Ph. D.	New Orleans University	Do.
Oscar Atwood, A. M.	Straight University	Do.
E. A. Alderman, D. C. L., LL. D.	Tulane University	Do.
Rev. Wm. D. Hyde, D. D., LL. D.	Bowdoin College	Brunswick, Me.
Rev. G. C. Chase, D. D., LL. D.	Bates College	Lewiston, Me.
George E. Fellows, Ph. D.	University of Maine	Orono, Me.
Rev. Charles L. White, A. M.	Colby College	Waterville, Me.
Thomas Fell, Ph. D., LL. D.	St. John's College	Annapolis, Md.
Ira Remsen, M. D., Ph. D., LL. D.	Johns Hopkins University	Baltimore, Md.
Rev. John F. Quirk, S. J.	Loyola College	Do.
	Morgan College	Do.
Charles W. Reid, Ph. D.	Washington College	Chestertown, Md.
R. W. Silvester	Maryland Agricultural College	College Park, Md.
Rev. Brother Abraham	Rock Hill College	Ellicott City, Md.
Rev. C. B. Schrantz, S. S.	St. Charles College	Do.
Rev. Wm. L. O'Hara, LL. D.	Mount St. Mary's College	Mount St. Marys, Md.
Rev. James Fraser, Ph. D.	New Windsor College	New Windsor, Md.
Rev. Thomas H. Lewis, D. D.	Western Maryland College	Westminster, Md.
Rev. George Harris, D. D., LL. D.	Amherst College	Amherst, Mass.
Rev. W. G. R. Mullan, S. J.	Boston College	Boston, Mass.
Rev. Wm. F. Warren, LL. D.	Boston University	Do.
Charles W. Eliot, LL. D.	Harvard University	Cambridge, Mass.
Rev. Samuel H. Lee, A. M.	French-American College	Springfield, Mass.
Rev. Elmer H. Capen, D. D., LL. D.	Tufts College	Tufts College, Mass.
Rev. Henry Hopkins, D. D.	Williams College	Williamstown, Mass.
G. Stanley Hall, Ph. D., LL. D.	Clark University	Worcester, Mass.
Rev. Joseph F. Hanselman, S. J.	College of the Holy Cross	Do.
Rev. David Jones, D. D.	Adrian College	Adrian, Mich.

III.—COLLEGE PRESIDENTS—Continued.

I.—Colleges for men and coeducational colleges of liberal arts—Continued.

Name of president.	University or college.	Address.
Samuel Dickie, L.L. D.	Albion College	Albion, Mich.
Rev. August F. Bruske, D. D.	Alma College	Alma, Mich.
James B. Angell, L.L. D.	University of Michigan	Ann Arbor, Mich.
Rev. James D. Foley, S. J.	Detroit College	Detroit, Mich.
C. H. Gurney, A. M.	Hillsdale College	Hillsdale, Mich.
Gerrit J. Kollen, L.L. D.	Hope College	Holland, Mich.
A. G. Slocum, L.L. D.	Kalamazoo College	Kalamazoo, Mich.
Rev. W. G. Sperry, D. D.	Olivet College	Olivet, Mich.
Rev. P. Engel, O. S. B., Ph. D.	St. John's University	Collegeville, Minn.
Georg Sverdrup	Augsburg Seminary	Minneapolis, Minn.
Cyrus Northrop, L.L. D.	University of Minnesota	Do.
Rev. Wm. H. Salmon	Carleton College	Northfield, Minn.
Rev. John N. Kildahl	St. Olaf College	Do.
Rev. Geo. H. Bridgman, D. D., L.L. D.	Hamline University	St. Paul, Minn.
James Wallace, Ph. D.	Macalester College	Do.
Rev. M. Wahlstrom, Ph. D.	Gustavus Adolphus College	St. Peter, Minn.
R. M. Lawrence, A. M.	Parker College	Winnebago City, Minn.
Rev. Wm. T. Lowrey, D. D.	Mississippi College	Clinton, Miss.
Rev. Wm. V. Foster, jr., D. D.	Rust University	Holly Springs, Miss.
Rev. W. B. Murrah, D. D., L.L. D.	Millsaps College	Jackson, Miss.
R. B. Fulton, L.L. D., chancellor	University of Mississippi	University, Miss.
J. W. Ellis, Ph. D., L.L. D.	Central Christian College	Albany, Mo.
Rev. R. L. Burks, D. D.	Southwest Baptist College	Bolivar, Mo.
Charles R. Wakeland, B. S.	Pike College	Bowling Green, Mo.
Rev. B. W. Baker, Ph. D., D. D.	Missouri Wesleyan College	Cameron, Mo.
D. R. Dungan, L.L. D.	Christian University	Canton, Mo.
Rev. J. Layton, C. M.	St. Vincent College	Cape Girardeau, Mo.
Rev. J. E. Dillard, A. B.	Clarksburg College	Clarksburg, Mo.
Richard H. Jesse, L.L. D.	University of the State of Missouri	Columbia, Mo.
Rev. Geo. W. Mitchell, D. D.	Grand River Christian Union College.	Edinburg, Mo.
T. B. Smith, A. M., acting	Central College	Fayette, Mo.
J. H. MacCracken, Ph. D.	Westminster College	Fulton, Mo.
Rev. C. C. Hemenway, Ph. D.	Pritchett College	Glasgow, Mo.
Jere T. Muir, L.L. D.	Lagrange College	Lagrange, Mo.
Rev. J. P. Greene, D. D., L.L. D.	William Jewell College	Liberty, Mo.
Rev. Wm. H. Black, D. D.	Missouri Valley College	Marshall, Mo.
W. W. Thomas	Morrisville College	Morrisville, Mo.
Rev. J. B. Ellis	Scarritt Collegiate Institute	Neosho, Mo.
L. H. Gehman	Odessa College	Odessa, Mo.
L. M. McAfee, A. M., chairman	Park College	Parkville, Mo.
Rev. Brother Baldwin, F. S. C.	Christian Brothers College	St. Louis, Mo.
Rev. W. B. Rogers, S. J.	St. Louis University	Do.
W. S. Chaplin, L.L. D., chancellor	Washington University	Do.
Rev. Homer T. Fuller, Ph. D., D. D.	Drury College	Springfield, Mo.
Rev. J. A. Thompson, D. D.	Tarkio College	Tarkio, Mo.
Geo. McA. Miller	Ruskin College	Trenton, Mo.
Geo. B. Addicks, A. M.	Central Wesleyan College	Warrenton, Mo.
Rev. J. W. Morris, Ph. D.	Montana Wesleyan University	Helena, Mont.
Oscar J. Craig, Ph. D.	University of Montana	Missoula, Mont.
Rev. D. R. Kerr, Ph. D., D. D.	University of Omaha	Bellevue, Nebr.
W. P. Aylsworth, L.L. D.	Cotner University	Bethany, Nebr.
Lewis A. Hoopes	Union College	College View, Nebr.
Rev. David B. Perry, D. D.	Doane College	Crete, Nebr.
Rev. Geo. Sutherland, D. D.	Grand Island College	Grand Island, Nebr.
Wm. N. Filson, A. B.	Hastings College	Hastings, Nebr.
Rev. E. B. Andrews, D. D., L.L. D., chancellor	University of Nebraska	Lincoln, Nebr.
Rev. M. P. Dowling, S. J.	Creighton University	Omaha, Nebr.
Rev. D. W. C. Huntington, D. D., L.L. D., chancellor	Nebraska Wesleyan University	University Place, Nebr.
Wm. E. Schell, A. M.	York College	York, Nebr.
Rev. J. E. Stubbs, D. D., L.L. D.	State University of Nevada	Reno, Nev.
Rev. W. J. Tucker, D. D., L.L. D.	Dartmouth College	Hanover, N. H.
Rev. Abbot Hilary, O. S. B.	St. Anselm's College	Manchester, N. H.
Rev. Joseph Zwinge, S. J.	St. Peter's College	Jersey City, N. J.
Rev. G. Bien, O. S. B., director	St. Benedict's College	Newark, N. J.
Austin Scott, Ph. D., L.L. D.	Rutgers College	New Brunswick, N. J.
Woodrow Wilson, Ph. D., L.L. D.	Princeton University	Princeton, N. J.
Rev. John A. Stafford, S. T. L.	Seton Hall College	South Orange, N. J.
William G. Tight, Ph. D.	University of New Mexico	Albuquerque, N. Mex.
Rev. B. C. Davis, Ph. D.	Alfred University	Alfred, N. Y.
Rev. Joseph F. Butler, O. F. M.	St. Bonaventure's College	Allegany, N. Y.
Rev. Lawrence T. Cole, Ph. D.	St. Stephen's College	Annandale, N. Y.
C. H. Levermore, Ph. D.	Adelphi College	Brooklyn, N. Y.
Henry S. Snow, L.L. D.	Polytechnic Institute of Brooklyn	Do.
Brother Jerome, O. S. F.	St. Francis College	Do.
Rev. Patrick McHale, C. M.	St. John's College	Do.
Rev. John B. Theis, S. J.	Canisius College	Buffalo, N. Y.

III.—COLLEGE PRESIDENTS—Continued.

I.—Colleges for men and coeducational colleges of liberal arts—Continued.

Name of president.	University or college.	Address.
Rev. Almon Gunnison, D. D.	St. Lawrence University	Canton, N. Y.
Rev. M. W. Stryker, D. D., LL. D.	Hamilton College	Clinton, N. Y.
Rev. Robert E. Jones, S. T. D.	Hobart College	Geneva, N. Y.
Rev. Geo. E. Merrill, D. D., LL. D.	Colgate University	Hamilton, N. Y.
J. G. Schurman, Sc. D., LL. D.	Cornell University	Ithaca, N. Y.
Rev. D. W. Hearn, S. J.	College of St. Francis Xavier	New York, N. Y.
Alexander S. Webb, LL. D.	College of the City of New York	Do.
Nicholas M. Butler, Ph. D., LL. D.	Columbia University	Do.
Rev. Brother Jerome, F. S. C.	Manhattan College	Do.
Rev. Geo. A. Pettit, S. J.	St. John's College	Do.
Rev. H. M. MacCracken, D. D., LL. D., chancellor.	New York University	Do.
Rev. W. F. Likly, C. M.	Niagara University	Niagara University, N. Y.
Rev. Rush Rhees, D. D.	University of Rochester	Rochester, N. Y.
Rev. A. V. V. Raymond, D. D.	Union College	Schenectady, N. Y.
Rev. J. R. Day, S. T. D., LL. D., chancellor.	Syracuse University	Syracuse, N. Y.
Rev. Leo Haid, D. D., O. S. B.	St. Mary's College	Belmont, N. C.
F. P. Venable, Ph. D.	University of North Carolina	Chapel Hill, N. C.
Rev. D. J. Sanders, D. D.	Biddle University	Charlotte, N. C.
Henry L. Smith, Ph. D.	Davidson College	Davidson, N. C.
Rev. John C. Kilgo, D. D.	Trinity College	Durham, N. C.
Rev. W. W. Staley, D. D.	Elon College	Elon College, N. C.
L. Lyndon Hobbs, A. M.	Guilford College	Guilford College, N. C.
Rev. R. L. Fritz, A. M.	Lenoir College	Hickory, N. C.
C. H. Mebane	North Carolina College	Mount Pleasant, N. C.
Chas. F. Meserve, LL. D.	Catawba College	Newton, N. C.
Rev. William H. Goler, D. D.	Shaw University	Raleigh, N. C.
Rev. C. E. Taylor, D. D., Litt. B.	Livingstone College	Salisbury, N. C.
James M. Robeson	Wake Forest College	Wake Forest, N. C.
Rev. John H. Morley, LL. D.	Weaverville College	Weaverville, N. C.
W. Merrifield, A. M.	Fargo College	Fargo, N. Dak.
Rev. E. P. Robertson, D. D.	University of North Dakota	University, N. Dak.
Rev. A. B. Church, A. M.	Red River Valley University	Wahpeton, N. Dak.
Rev. Albert B. Riker, D. D.	Buchtel College	Akron, Ohio.
Alston Ellis, Ph. D., LL. D.	Mount Union College	Alliance, Ohio.
Rev. R. M. Freshwater, D. D.	Ohio University	Athens, Ohio.
Rev. C. Riemenschneider, Ph. D., D. D.	Baldwin University	Berea, Ohio.
Rev. David McKinney, D. D.	German Wallace College	Do.
Rev. Albert A. Dierckes, S. J.	Cedarville College	Cedarville, Ohio.
Howard Ayers, Ph. D., LL. D.	St. Xavier College	Cincinnati, Ohio.
Rev. John I. Zahm, S. J.	University of Cincinnati	Do.
Rev. C. F. Thwing, D. D., LL. D.	St. Ignatius College	Cleveland, Ohio.
Rev. L. H. Schuh, Ph. D.	Western Reserve University	Do.
Rev. W. O. Thompson, D. D., LL. D.	Capital University	Columbus, Ohio.
Rev. J. R. H. Latchaw, D. D.	Ohio State University	Do.
Rev. J. W. Bashford, Ph. D., D. D.	Defiance College	Defiance, Ohio.
Rev. C. Manchester, D. D.	Ohio Wesleyan University	Delaware, Ohio.
Rev. Wm. F. Peirce, L. H. D.	Findlay College	Findlay, Ohio.
Rev. Emory W. Hunt, D. D.	Kenyon College	Gambier, Ohio.
Rev. S. P. Long, A. M.	Denison University	Granville, Ohio.
Alfred T. Perry, A. M.	Hiram College	Hiram, Ohio.
Robert B. Spicer, A. B.	Lima College	Lima, Ohio.
Rev. Jesse Johnson, D. D.	Marietta College	Marietta, Ohio.
Rev. Guy P. Benton, D. D.	Franklin College	New Athens, Ohio.
Rev. G. W. MacMillan, Ph. D., D. D.	Muskingum College	New Concord, Ohio.
Rev. J. M. Davis, Ph. D., D. D.	Oberlin College	Oberlin, Ohio.
Rev. Charles E. Miller, D. D.	Miami University	Oxford, Ohio.
George Scott, Ph. D., Litt. D.	Richmond College	Richmond, Ohio.
Rev. Joshua H. Jones, D. D.	Rio Grande College	Rio Grande, Ohio.
James B. Unthank, M. S.	Scio College	Scio, Ohio.
Rev. Louis E. Holden, D. D.	Wittenberg College	Springfield, Ohio.
Hon. Wm. A. Bell, A. M.	Heidelberg University	Tiffin, Ohio.
D. R. Boyd, Ph. D.	Otterbein University	Westerville, Ohio.
Wallace H. Lee, A. M.	Wilberforce University	Wilberforce, Ohio.
Rev. C. C. Poling, Ph. D.	Wilmington College	Wilmington, Ohio.
Wm. N. Ferrin, A. M., dean	University of Wooster	Wooster, Ohio.
Rev. H. L. Boardman, A. M.	Antioch College	Yellowsprings, Ohio.
Edwin McGrew, M. S.	University of Oklahoma	Norman, Okla.
P. O. Bonebrake, A. M.	Albany College	Albany, Oreg.
	Dallas College	Dallas, Oreg.
	University of Oregon	Eugene, Oreg.
	Pacific University	Forestgrove, Oreg.
	McMinnville College	McMinnville, Oreg.
	Pacific College	Newberg, Oreg.
	Philomath College	Philomath, Oreg.

III.—COLLEGE PRESIDENTS—Continued.

I.—Colleges for men and coeducational colleges of liberal arts—Continued.

Name of president.	University or college.	Address.
Willis C. Hawley, A. M.	Willamette University	Salem, Oreg.
John A. Brashear, Sc. D., acting chancellor.	Western University of Pennsylvania.	Allegheny, Pa.
Rev. Theodore L. Seip, D. D.	Muhlenberg College	Allentown, Pa.
Rev. H. U. Roop, Ph. D.	Lebanon Valley College	Annville, Pa.
Rev. Leander Schnerr, O. S. B.	St. Vincent College	Beatty, Pa.
Rev. Arthur Staples, A. M.	Beaver College	Beaver, Pa.
Rev. W. P. Johnston, D. D.	Geneva College	Beaverfalls, Pa.
Rev. Aug. Schultz, D. D.	Moravian College	Bethlehem, Pa.
Rev. G. E. Reed, D. D., LL. D.	Dickinson College	Carlisle, Pa.
Col. C. E. Hyatt, C. E.	Pennsylvania Military College	Chester, Pa.
Rev. Henry T. Spangler, D. D.	Ursinus College	Collegeville, Pa.
Rev. E. D. Warfield, LL. D.	Lafayette College	Easton, Pa.
Rev. H. W. McKnight, D. D., LL. D.	Pennsylvania College	Gettysburg, Pa.
Rev. Theo. B. Roth, D. D.	Thiel College	Greenville, Pa.
Rev. I. C. Kettler, Ph. D., D. D.	Grove City College	Grove City, Pa.
Isaac Sharpless, Sc. D., LL. D.	Haverford College	Haverford, Pa.
I. H. Brumbaugh, A. M., acting.	Juniata College	Huntingdon, Pa.
Rev. J. S. Stahr, Ph. D., D. D.	Franklin and Marshall College	Lancaster, Pa.
John H. Harris, Ph. D., LL. D.	Bucknell University	Lewisburg, Pa.
Rev. Isaac N. Kendall, D. D.	Lincoln University	Lincoln University, Pa.
Rev. Wm. H. Crawford, D. D.	Allegheny College	Meadville, Pa.
Rev. James D. Woodring, A. M.	Albright College	Myerstown, Pa.
Rev. R. G. Ferguson, D. D.	Westminster College	New Wilmington, Pa.
Rev. R. E. Thompson, S. T. D.	Central High School	Philadelphia, Pa.
Brother Wolfred	La Salle College	Do.
C. C. Harrison, LL. D., provost.	University of Pennsylvania	Do.
Rev. M. A. Hehr, C. S. Sp.	Holy Ghost College	Pittsburg, Pa.
Rev. George W. Enders, D. D.	Susquehanna University	Selinsgrove, Pa.
Thomas H. Drown, LL. D.	Lehigh University	South Bethlehem, Pa.
G. W. Atherton, LL. D.	Pennsylvania State College	State College, Pa.
Joseph Swain, LL. D.	Swarthmore College	Swarthmore, Pa.
Rev. L. A. Delurey, O. S. A.	Villanova College	Villanova, Pa.
C. F. Bail, A. M.	Volant College	Volant, Pa.
Rev. J. D. Moffat, D. D., LL. D.	Washington and Jefferson College	Washington, Pa.
A. E. Turner, A. M.	Waynesburg College	Waynesburg, Pa.
Rev. W. H. P. Faunce, D. D.	Brown University	Providence, R. I.
Harrison Randolph, LL. D.	College of Charleston	Charleston, S. C.
A. E. Spencer, A. M.	Presbyterian College of South Carolina.	Clinton, S. C.
Rev. D. H. Johnson, D. D.	Allen University	Columbia, S. C.
F. C. Woodward, Litt. D.	South Carolina College	Do.
Rev. Francis Y. Pressly, D. D.	Erskine College	Duwest, S. C.
A. P. Montague, Ph. D., LL. D.	Furman University	Greenville, S. C.
Geo. B. Cromer, A. M.	Newberry College	Newberry, S. C.
Rev. L. M. Dunton, D. D.	Claffin University	Orangeburg, S. C.
Henry N. Snyder, A. M.	Wofford College	Spartanburg, S. C.
Rev. C. H. French, D. D.	Huron College	Huron, S. Dak.
Rev. W. I. Graham, D. D.	Dakota University	Mitchell, S. Dak.
Rev. I. P. Patch	Redfield College	Redfield, S. Dak.
Garrett Droppers, A. B.	University of South Dakota	Vermilion, S. Dak.
Rev. H. K. Warren, A. M.	Yankton College	Yankton, S. Dak.
Rev. A. G. Buckner, D. D., LL. D.	U. S. Grant University	Athens, Tenn.
Rev. George Summey, D. D., chancellor.	King College	Bristol, Tenn.
Rev. Samuel A. Coile, D. D.	Southwestern Presbyterian University.	Clarksville, Tenn.
Rev. J. F. Spence, S. T. D., LL. D., chancellor.	Greeneville and Tusculum College.	Greeneville, Tenn.
Rev. J. E. Lowery, A. M.	American University of Harriman.	Harriman, Tenn.
G. M. Savage, LL. D.	Hiwassee College	Hiwassee College, Tenn.
J. T. Henderson, A. M.	Southwestern Baptist University	Jackson, Tenn.
Rev. R. W. McGranahan, D. D.	Carson and Newman College	Jefferson City, Tenn.
Chas. W. Dahney, Ph. D., LL. D.	Knox College	Knoxville, Tenn.
N. Green, LL. D., chancellor	University of Tennessee	Do.
Rev. James T. Cooter, A. M.	Cumberland University	Lebanon, Tenn.
Rev. B. G. Mitchell, A. M.	Washington College	Limestone, Tenn.
Rev. Samuel F. Wilson, D. D.	Bethel College	McKenzie, Tenn.
Brother Anthony	Maryville College	Maryville, Tenn.
J. Hopwood, A. M.	Christian Brothers College	Memphis, Tenn.
Rev. James G. Merrill, D. D.	Milligan College	Milligan, Tenn.
Rev. Peter B. Guernsey, A. M.	Fisk University	Nashville, Tenn.
James D. Porter, LL. D.	Roger Williams University	Do.
James H. Kirkland, Ph. D., LL. D., chancellor.	University of Nashville	Do.
Rev. Jay B. Hamilton, D. D.	Vanderbilt University	Do.
B. Lawton Wiggins, LL. D., vice- chancellor.	Walden University	Do.
W. N. Billingsley, A. M.	University of the South	Sewanee, Tenn.
	Burritt College	Spencer, Tenn.

III.—COLLEGE PRESIDENTS—Continued.

I.—Colleges for men and coeducational colleges of liberal arts—Continued.

Name of president.	University or college.	Address.
J. B. Reed	Sweetwater College	Sweetwater, Tenn.
Rev. John T. Boland, C. S. C.	St. Edward's College	Austin, Tex.
Wm. L. Prather, LL. D.	University of Texas	Do.
J. H. Grove, A. M.	Howard Payne College	Brownwood, Tex.
T. H. Bridges	Henry College	Campbell, Tex.
Rev. Oscar L. Fisher, D. D.	Fort Worth University	Fort Worth, Tex.
G. J. Nunn, A. M.	Polytechnic College	Do.
Rev. A. Guyol, S. J.	St. Mary's University	Galveston, Tex.
Robert S. Hyer, LL. D., regent	Southwestern University	Georgetown, Tex.
W. I. Gibson, A. M.	Burleson College	Greenville, Tex.
Ely V. Zollars, LL. D.	Texas Christian University	Hermoson, Tex.
Rev. M. W. Dogan, Ph. D.	Wiley University	Marshall, Tex.
Rev. John Wolf	St. Louis College	San Antonio, Tex.
Rev. Thomas S. Clyce, D. D.	Austin College	Sherman, Tex.
Jesse Anderson, Ph. D.	Trinity University	Tehuacana, Tex.
Samuel P. Brooks, A. M.	Baylor University	Waco, Tex.
Rev. I. M. Burgan, D. D.	Paul Quinn College	Do.
James H. Linford, B. S.	Brigham Young College	Logan, Utah.
Rev. George Bailey	Sheldon Jackson College	Salt Lake City, Utah.
Joseph T. Kingsbury, Ph. D., Sc. D.	University of Utah	Do.
Rev. M. H. Buckham, D. D.	University of Vermont	Burlington, Vt.
Ezra Brainerd, LL. D.	Middlebury College	Middlebury, Vt.
Rev. Allan D. Brown, LL. D.	Norwich University	Northfield, Vt.
Robert E. Blackwell, Ph. D.	Randolph-Macon College	Ashland, Va.
W. B. Yount	Bridgewater College	Bridgewater, Va.
P. B. Barringer, M. D., LL. D., chairman	University of Virginia	Charlottesville, Va.
Rev. B. G. Waterhouse, D. D.	Emory and Henry College	Emory, Va.
Rev. J. W. Rosebro, D. D.	Fredericksburg College	Fredericksburg, Va.
Rev. Richard McIlwaine, D. D.	Hampden-Sidney College	Hampden-Sidney, Va.
George H. Denny, Ph. D.	Washington and Lee University	Lexington, Va.
F. W. Boatwright, LL. D.	Richmond College	Richmond, Va.
M. MacVicar, Ph. D., LL. D.	Virginia Union University	Do.
Julius D. Dreher, Ph. D.	Roanoke College	Salem, Va.
L. G. Tyler, LL. D.	College of William and Mary	Williamsburg, Va.
A. C. Jones, Ph. D.	Vashon College	Burton, Wash.
Frank P. Graves, Ph. D., LL. D., Litt. D.	University of Washington	Seattle, Wash.
Rev. J. Rebmann, S. J.	Gonzaga College	Spokane, Wash.
Orman C. Palmer, A. M., acting	Puget Sound University	Tacoma, Wash.
F. B. Gault, Ph. D.	Whitworth College	Do.
Brother Zenonian	St. James College	Vancouver, Wash.
Rev. S. B. L. Penrose, A. B., B. D.	Whitman College	Walla Walla, Wash.
D. W. Shaw, A. M.	Morris Harvey College	Barboursville, W. Va.
T. E. Cramblet	Bethany College	Bethany, W. Va.
D. B. Purinton, Ph. D., LL. D.	West Virginia University	Morgantown, W. Va.
Rev. S. Plantz, Ph. D., D. D.	Lawrence University	Appleton, Wis.
Rev. H. A. Muehlmeier, D. D.	Beloit College	Beloit, Wis.
Lars M. Gimmetstad	Mission House	Franklin, Wis.
	Gale College	Galesville, Wis.
	University of Wisconsin	Madison, Wis.
	Milton College	Milton, Wis.
Rev. M. J. F. Albrecht	Concordia College	Milwaukee, Wis.
Rev. Alexander J. Burrowes, S. J.	Marquette College	Do.
Rev. Richard C. Hughes, A. M.	Ripon College	Ripon, Wis.
Rev. A. F. Ernst	Northwestern University	Watertown, Wis.
Rev. Elmer E. Smiley, D. D.	University of Wyoming	Laramie, Wyo.

II.—Colleges for women.

Rev. Hiram G. Davis, D. D.	Athens Female College	Athens, Ala.
Henry Y. Weissinger, A. M.	East Lake Athenaeum	Eastlake, Ala.
Thos. F. Jones	Union Female College	Eufaula, Ala.
Rev. Robert G. Patrick, D. D.	Judson Female Institute	Marion, Ala.
Jas. D. Wade, A. M.	Marion Female Seminary	Do.
Rev. Frank B. Webb, D. D.	Isbell College	Talladega, Ala.
E. H. Murfee, LL. D.	Central Female College	Tuscaloosa, Ala.
Rev. W. F. Melton, Ph. D.	Tuscaloosa Female College	Do.
John Massey, LL. D.	Alabama Conference Female College	Tuskegee, Ala.
	Central Baptist College	Conway, Ark.
Mrs. C. T. Mills	Mills College	Mills College, Cal.
Sister Mary Bernardine	College of Notre Dame	San Jose, Cal.
Sister Lidwine	Trinity College	Washington, D. C.
Mrs. M. A. Lipscomb	Lucy Cobb Institute	Athens, Ga.

III.—COLLEGE PRESIDENTS—Continued.

II.—Colleges for women—Continued.

Name of president.	University or college.	Address.
Chas. C. Cox, Ph. D.	Southern Female College	College Park, Ga.
Rev. Homer Bush, A. M.	Andrew Female College	Cuthbert, Ga.
Miss Mabel Head,	Dalton Female College	Dalton, Ga.
C. H. S. Jackson, A. M.	Monroe Female College	Forsyth, Ga.
A. W. Van Hoose, chairman	Brenau College	Gainesville, Ga.
Rufus W. Smith, A. M.	Lagrange Female College	Lagrange, Ga.
Rev. G. A. Nunnally, D. D.	Southern Female College	Do.
Rev. J. W. Roberts, D. D.	Wesleyan Female College	Macon, Ga.
T. J. Simmons, A. M.	Shorter College	Rome, Ga.
Rev. Joseph R. Harker, Ph. D.	Illinois Woman's College	Jacksonville, Ill.
Rev. C. W. Leffingwell, D. D., rector.	St. Mary's School	Knoxville, Ill.
Emily Reynolds	Rockford College	Rockford, Ill.
Rev. F. B. Millsbaugh, D. D.	College of the Sisters of Bethany	Topeka, Kans.
Rev. Benj. F. Cabell	Potter College	Bowling Green, Ky.
Rev. J. C. Ely, D. D.	Caldwell College	Danville, Ky.
Th. Smith, A. M.	Beaumont College	Harrodsburg, Ky.
Rev. Edmund Harrison, A. M.	Bethel Female College	Russellville, Ky.
B. C. Hagerman, A. M.	Hamilton Female College	Lexington, Ky.
H. B. McClellan, Litt. D.	Sayre Female Institute	Do.
Rev. C. C. Fisher, A. M.	Millersburg Female College	Millersburg, Ky.
Mrs. J. B. Skinner	Jessamine Female Institute	Nicholasville, Ky.
Rev. T. S. McCall, A. M.	Owensboro Female College	Owensboro, Ky.
W. H. Pritchett	Logan Female College	Russellville, Ky.
B. J. Pinkerton	Stanford Female College	Stanford, Ky.
Rev. F. W. Lewis	Silliman Collegiate Institute	Clinton, La.
G. W. Thigpen, A. M.	Louisiana Female College	Keatchie, La.
T. S. Sligh, A. M.	Mansfield Female College	Mansfield, La.
Brandt V. B. Dixon, LL. D.	H. Sophie Newcomb Memorial Col- lege.	New Orleans, La.
Henry E. Trefethen, A. M., act- ing.	Maine Wesleyan Seminary and Fe- male College.	Kents Hill, Me.
O. H. Perry	Westbrook Seminary	Woodfords, Me.
Mary Meletia of Notre Dame	Notre Dame of Maryland	Baltimore, Md.
Rev. John F. Goucher, D. D.	Woman's College of Baltimore	Do.
J. H. Apple, A. M.	Woman's College	Frederick, Md.
M. L. Maier, Ph. M.	Kee Mar College	Hagerstown, Md.
Rev. J. H. Turner, A. M.	Maryland College for Young La- dies.	Lutherville, Md.
C. C. Bragdon, A. M.	Lasell Seminary for Young Women	Auburndale, Mass.
Miss Agnes Irwin, dean	Radcliffe College	Cambridge, Mass.
Rev. L. Clark Seelye, D. D., LL. D.	Smith College	Northampton, Mass.
Mary E. Woolley, Litt. D., L. H. D	Mount Holyoke College	South Hadley, Mass.
Miss Caroline Hazard	Wellesley College	Wellesley, Mass.
Rev. R. B. Abbott, D. D.	Albert Lea College	Albert Lea, Minn.
B. G. Lowrey, A. M.	Blue Mountain Female College	Blue Mountain, Miss.
A. F. Watkins	Whitworth Female College	Brookhaven, Miss.
Rev. John L. Johnson, D. D., LL. D.	Hillman College	Clinton, Miss.
Hon. A. A. Kincannon	Industrial Institute and College	Columbus, Miss.
J. A. Sanderson, principal	Central Mississippi Institute	French Camp, Miss.
L. T. Fitzhugh, A. M.	Belhaven College for Young Ladies	Jackson, Miss.
J. L. Logan	McComb Female Institute	McComb, Miss.
J. W. Beeson, A. M.	East Mississippi Female College	Meridian, Miss.
Hon. James R. Preston, A. M.	Stanton College for Young Ladies	Natchez, Miss.
Rev. J. W. Malone, D. D.	Woman's College	Oxford, Miss.
S. Decatur Lucas	Chickasaw Female College	Pontotoc, Miss.
Mrs. M. H. Meek	Port Gibson Female College	Port Gibson, Miss.
Mrs. W. T. Moore	Christian College	Columbia, Mo.
Rev. S. F. Taylor, D. D.	Stephens College	Do.
Rev. Hiram D. Groves	Howard Payne College	Fayette, Mo.
Rev. J. M. Spencer	Synodical Female College	Pulton, Mo.
Edward W. White, A. M.	Baptist College for Young Ladies	Lexington, Mo.
Rev. Z. M. Williams, A. M.	Central Female College	Do.
C. M. Williams, A. M.	Liberty Ladies' College	Liberty, Mo.
J. W. Million, A. M.	Hardin College	Mexico, Mo.
Mrs. V. A. C. Stockard	Cotley College for Young Ladies	Nevada, Mo.
M. H. Reaser, Ph. D.	Lindenwood College for Women	St. Charles, Mo.
F. T. Schultz, A. M.	Bordentown Female College	Bordentown, N. J.
Jasper W. Freley, M. S., acting	Wells College	Aurora, N. Y.
Truman J. Backus, LL. D.	Packer Collegiate Institute	Brooklyn, N. Y.
Rev. A. C. McKenzie, D. D.	Elmira College	Elmira, N. Y.
Laura D. Gill, A. M., dean	Barnard College	New York, N. Y.
Rev. J. M. Taylor, D. D., LL. D.	Vassar College	Poughkeepsie, N. Y.
Archibald A. Jones, A. M.	Asheville College for Young Women	Asheville, N. C.
Rev. C. B. King, A. M.	Elizabeth College	Charlotte, N. C.
S. A. Wolff, A. M.	Gaston College	Dallas, N. C.
Mrs. Lucy H. Robertson	Greensboro Female College	Greensboro, N. C.
M. W. Hutton	Claremont Female College	Hickory, N. C.

III.—COLLEGE PRESIDENTS—Continued.

II.—Colleges for women—Continued.

Name of president.	University or college.	Address.
M. S. Davis, A. M.	Louisburg Female College.....	Louisburg, N. C.
John C. Scarborough.....	Chowan Baptist Female Institute..	Murfreesboro, N. C.
F. P. Holgood, A. M.	Oxford Female Seminary.....	Oxford, N. C.
Rev. R. T. Vann, D. D.	Baptist Female University.....	Raleigh, N. C.
Rev. John H. Clewell, Ph. D.	Salem Female Academy and College.	Salem, N. C.
Rev. John H. Thomas, D. D.	Oxford College.....	Oxford, Ohio.
Leila S. McKee, Ph. D.	Western College.....	Do.
Miss Mary Evans, A. M.	Lake Erie College.....	Painesville, Ohio.
Rev. J. W. Knappenberger, A. M.	Allentown College for Women.....	Allentown, Pa.
Rev. J. Max Hark, D. D.	Moravian Seminary and College for Women.	Bethlehem, Pa.
Rev. S. B. Linhart, A. M.	Blairsville College.....	Blairsville, Pa.
M. Carey Thomas, Ph. D., LL. D.	Bryn Mawr College.....	Bryn Mawr, Pa.
Rev. Samuel A. Martin, D. D.	Wilson College.....	Chambersburg, Pa.
E. E. Campbell, Ph. D.	Irving Female College.....	Mechanicsburg, Pa.
Rev. Chalmers Martin, A. M.	Pennsylvania College for Women.....	Pittsburg, Pa.
Rev. W. W. Daniel, D. D.	Columbia Female College.....	Columbia, S. C.
Miss Euphemia McClintock, A. B.	Presbyterian College for Women.....	Do.
Rev. James Boyce.....	Due West Female College.....	Duwest, S. C.
Lee D. Lodge, Ph. D.	Limestone College.....	Gaffney, S. C.
A. S. Townes.....	Greenville College for Women.....	Greenville, S. C.
Edward C. James, Litt. D.	Greenville Female College.....	Do.
Robert P. Pell, A. B.	Converse College.....	Spartanburg, S. C.
Rev. B. G. Clifford, D. D., Ph. D.	Clifford Seminary.....	Union, S. C.
Rev. S. Lander, D. D.	Williamston Female College.....	Williamston, S. C.
Rev. S. N. Barker.....	Sullins College.....	Bristol, Tenn.
R. E. Hatton, Ph. D.	Brownsville Female College.....	Brownsville, Tenn.
T. E. Allen and J. H. Chiles.....	Tennessee Female College.....	Franklin, Tenn.
Z. K. Griffin, B. S.	Howard Female College.....	Gallatin, Tenn.
Rev. A. B. Jones, D. D., LL. D.	Memphis Conference Female Institute.	Jackson, Tenn.
Miss V. O. Wardlaw, A. M.	Soule Female College.....	Murfreesboro, Tenn.
C. A. Folk, A. B.	Rosobol College.....	Nashville, Tenn.
J. D. Blanton.....	Ward Seminary.....	Do.
B. E. Atkins and T. L. Bryan.....	Martin Female College.....	Pulaski, Tenn.
Rev. T. P. Walton.....	Synodical Female College.....	Rogersville, Tenn.
W. A. Wilson, D. D.	Carlton College.....	Bonham, Tex.
L. F. Smith, A. B.	Baylor Female College.....	Belton, Tex.
Rev. J. E. Harrison, A. B.	Chappell Hill Female College.....	Chappell Hill, Tex.
A. Q. Nash, C. E.	San Antonio Female College.....	San Antonio, Tex.
Rev. W. M. Dyer, A. M.	Mary Nash College.....	Sherman, Tex.
Miss Kate M. Hunt.....	Martha Washington College.....	Abingdon, Va.
J. F. Howell, LL. D.	Stonewall Jackson Institute.....	Do.
Rev. L. H. Shuck, D. D.	Southwest Virginia Institute.....	Bristol, Va.
Rev. C. F. James, D. D.	Albemarle College for Young Ladies.....	Charlottesville, Va.
Miss Matty L. Cocke.....	Roanoke Female College.....	Danville, Va.
W. W. Smith, LL. D.	Hollins Institute.....	Hollins, Va.
Rev. J. J. Scherer, A. M.	Randolph-Macon Woman's College.....	Lynchburg, Va.
Arthur K. Davis, A. M.	Marion Female College.....	Marion, Va.
Rev. James Nelson, D. D.	Southern Female College.....	Petersburg, Va.
Rev. A. B. Warwick.....	Woman's College.....	Richmond, Va.
R. L. Telford.....	Valley Female College.....	Winchester, Va.
Mrs. Mary W. Murphy.....	Lewisburg Female Institute.....	Lewisburg, W. Va.
Miss Ellen C. Sabin, A. M.	Parkersburg Seminary.....	Parkersburg, W. Va.
	Milwaukee-Downer College.....	Milwaukee, Wis.

III.—Schools of technology.

Barton O. Aylesworth, LL. D.	Alabama Polytechnic Institute.....	Auburn, Ala.
Charles S. Palmer, Ph. D.	Colorado Agricultural College.....	Fort Collins, Colo.
Rev. R. W. Stinson, acting.....	State School of Mines.....	Golden, Colo.
Lyman Hall.....	Connecticut Agricultural College.....	Storrs, Conn.
Rev. Frank W. Gunsaulus, D. D.	State School of Technology.....	Atlanta, Ga.
W. E. Stone, Ph. D.	Armour Institute of Technology.....	Chicago, Ill.
Carl L. Mees, Ph. D.	Purdue University.....	Lafayette, Ind.
W. M. Beardshear, LL. D.	Rose Polytechnic Institute.....	Terre Haute, Ind.
Ernest R. Nichols, A. M.	Iowa Agricultural College.....	Ames, Iowa.
Commander R. Wainwright, U. S. N., superintendent.	Kansas Agricultural College.....	Manhattan, Kans.
H. H. Goodell, LL. D.	United States Naval Academy.....	Annapolis, Md.
H. S. Pritchett, Ph. D., LL. D.	Massachusetts Agricultural College.....	Amherst, Mass.
Edmund A. Engler, Ph. D., LL. D.	Massachusetts Institute of Technology.	Boston, Mass.
J. L. Snyder, Ph. D.	Worcester Polytechnic Institute.....	Worcester, Mass.
	Michigan Agricultural College.....	Agricultural College, Mich.

III.—COLLEGE PRESIDENTS—Continued.

III.—Schools of technology—Continued.

Name of president.	Institution.	Address.
F. W. McNair, B. S.	Michigan College of Mines	Houghton, Mich.
J. C. Hardy, A. M.	Mississippi Agricultural and Mechanical College.	Agricultural College, Miss.
W. H. Lanier, A. B.	Alcorn Agricultural and Mechanical College.	Westside, Miss.
Rev. James Reid, A. B.	Montana College of Agriculture and Mechanic Arts.	Bozeman, Mont.
C. S. Murklund, Ph. D.	New Hampshire College of Agriculture and Mechanic Arts.	Durham, N. H.
Alexander C. Humphreys, M. E.	Stevens Institute of Technology....	Hoboken, N. J.
Luther Foster, M. S. A.	New Mexico College of Agriculture and Mechanic Arts.	Mesilla Park, N. Mex.
Charles R. Keyes, Ph. D., director.	New Mexico School of Mines	Socorro, N. Mex.
W. S. Aldrich, M. E., director	Clarkson School of Technology....	Potsdam, N. Y.
Palmer C. Ricketts, C. E.	Rensselaer Polytechnic Institute....	Troy, N. Y.
Col. A. L. Mills, U. S. A., supt.	United States Military Academy....	West Point, N. Y.
James B. Dudley, A. M.	Agricultural and Mechanical College for the Colored Race.	Greensboro, N. C.
George T. Winston, LL. D.	North Carolina College of Agriculture and Mechanic Arts.	West Raleigh, N. C.
J. H. Worst, LL. D.	North Dakota Agricultural College.	Agricultural College N. Dak.
Cady Staley, LL. D.	Case School of Applied Science	Cleveland, Ohio.
Angelo C. Scott, A. M.	Oklahoma Agricultural and Mechanical College.	Stillwater, Okla.
Thomas M. Gatch, Ph. D.	Oregon Agricultural College	Corvallis, Oreg.
John H. Washburn, Ph. D.	Rhode Island College of Agriculture and Mechanic Arts.	Kingston, R. I.
Asbury Coward, LL. D., supt.	South Carolina Military Academy ..	Charleston, S. C.
Henry S. Hartzog, B. S.	Clemson Agricultural College	Clemson College, S. C.
John W. Heston, Ph. D., LL. D.	South Dakota Agricultural College.	Brookings, S. Dak.
Robert L. Slagle, Ph. D.	State School of Mines	Rapid City, S. Dak.
David F. Houston, A. M.	Agricultural and Mechanical College of Texas.	College Station, Tex.
W. J. Kerr, B. S.	Agricultural College of Utah	Logan, Utah.
J. M. McBryde, LL. D.	Virginia Agricultural and Mechanical College.	Blacksburg, Va.
Scott Shipp, LL. D., supt.	Virginia Military Institute	Lexington, Va.
E. A. Bryan, A. M.	Washington Agricultural College and School of Science.	Pulman, Wash.

IV.—PRINCIPALS OF NORMAL SCHOOLS.

Public normal schools.

Location.	Name of institution.	Principal.
ALABAMA.		
Florence	State Normal College	Marshall C. Wilson.
Jacksonville	do	C. W. Doughter.
Livingston	Alabama Normal College for Girls.	Miss Julia S. Tutwiler.
Normal	Agricultural and Mechanical College for Negroes.	W. H. Council.
Troy	State Normal College	E. M. Shackelford.
ARIZONA.		
Flagstaff	Northern Arizona Normal School ..	A. N. Taylor.
Tempe	Territorial Normal School of Arizona.	A. J. Matthews.
ARKANSAS.		
Pine Bluff	Branch Normal College	J. C. Corbin.
CALIFORNIA.		
Chico	California State Normal School	Chas. C. Van Liew.
Los Angeles	State Normal School	Edward T. Pierce.
San Diego	do	Samuel T. Black.
San Jose	do	Morris Elmer Dailey.
COLORADO.		
Greeley	Colorado State Normal School	Z. X. Snyder.

IV.—PRINCIPALS OF NORMAL SCHOOLS—Continued.

Public normal schools—Continued.

Location.	Name of institution.	Principal.
CONNECTICUT.		
Bridgeport	Bridgeport Training School.....	Besse E. Howes.
New Britain	Normal Training School	Marcus White.
New Haven	State Normal Training School.....	Arthur B. Morrill.
Willimantic	do	George P. Phenix.
DISTRICT OF COLUMBIA.		
Washington	Washington Normal School No. 1 ..	Anne M. Goding.
Do.....	Washington Normal School No. 2 ..	Lucy E. Moten.
FLORIDA.		
De Funiak Springs.....	Florida State Normal School	C. L. Hayes.
Tallahassee	Florida State Normal and Industrial College.	T. De S. Tucker.
GEORGIA.		
Athens	State Normal School	E. C. Branson.
College	Georgia State Industrial College ..	R. R. Wright.
Milledgeville	Georgia Normal and Industrial College.	J. Harris Chappell.
IDAHO.		
Albion	State Normal School	J. C. Black.
Lewiston	do	Geo. E. Knepper.
ILLINOIS.		
Carbondale	Southern Illinois State Normal University.	D. B. Parkinson.
Charleston	Eastern Illinois State Normal School.	L. C. Lord.
Chicago, Station O.....	Chicago Normal School	Arnold Tompkins.
DeKalb	Northern Illinois State Normal School.	John W. Cook.
Normal	Illinois State Normal University...	David Felmley.
INDIANA.		
Indianapolis	Indianapolis Normal School.....	M. E. Nicholson.
Terre Haute	Indiana State Normal School.....	William W. Parsons.
IOWA.		
Cedarfalls	Iowa State Normal School	Homer H. Seerley.
Dexter	Dexter Normal School	D. P. Repass.
Hawarden	Hawarden Public Normal School ..	C. H. Brake.
Woodbine	Woodbine Normal and Commercial School.	M. A. Reed.
KANSAS.		
Emporia	State Normal School	Jasper N. Wilkinson.
KENTUCKY.		
Frankfort.....	State Normal School for Colored Persons.	James S. Hathaway.
Hazard	Hazard Normal School	Bailey P. Wootton.
Louisville	Louisville Normal School	W. J. McConathy.
LOUISIANA.		
Natchitoches	Louisiana State Normal School	B. C. Caldwell.
New Orleans	New Orleans Normal School.....	Miss Margaret C. Hanson.
MAINE.		
Castine	Eastern State Normal School.....	Albert F. Richardson.
Farmington	Farmington State Normal School ..	George C. Purington.
Fort Kent	Madawaska Training School	Mary P. Nowland.
Gorham	State Normal School	W. J. Corthell.
Lee	Lee Normal Academy	James D. Murphy.
Springfield	Springfield Normal School.....	Miss Ava H. Chadbourne.
MARYLAND.		
Baltimore	Maryland State Normal School....	E. B. Prettyman.
MASSACHUSETTS.		
Boston	Boston Normal School.....	Wallace C. Boyden.
Do.....	Massachusetts Normal Art School..	George H. Bartlett.

IV.—PRINCIPALS OF NORMAL SCHOOLS—Continued.

Public normal schools—Continued.

Location.	Name of institution.	Principal.
MASSACHUSETTS—continued.		
Bridgewater.....	State Normal School	Albert G. Boyden.
Cambridge.....	Cambridge Training School for Teachers.	Herbert H. Bates.
Fitchburg.....	State Normal School	John G. Thompson.
Frammingham.....	.....do.....	Henry Whittmore.
Lowell.....	Training School for Teachers	Gertrude Edmund.
Salem.....	.....do.....	W. P. Beckwith.
Westfield.....	.....do.....	Charles S. Chapin.
Worcester.....	.....do.....	E. Harlow Russell.
MICHIGAN.		
Detroit.....	Washington Normal Training School.	Chas. L. Spain.
Mount Pleasant.....	Central State Normal School.....	Chas. T. Grawn.
Ypsilanti.....	Michigan State Normal School.....	Elmer A. Lyman.
MINNESOTA.		
Mankato.....	State Normal School	Chas. H. Cooper.
Moorhead.....	.....do.....	Frank A. Weld.
St. Cloud.....	.....do.....	George R. Kleeberger.
St. Paul.....	Teachers' Training School	Miss B. M. Phelan.
Winona.....	State Normal School	J. F. Millsbaugh.
MISSISSIPPI.		
Abbeville.....	Abbeville Normal School.....	K. Harmon.
Blue Springs.....	Blue Springs Normal College.....	E. W. Cochran.
Holly Springs.....	Mississippi State Normal School	E. D. Miller.
Louisville.....	Louisville Normal School.....	J. A. Hall.
Sherman.....	Mississippi Normal Institute	D. H. Davis.
Walnut Grove.....	Mississippi Central Normal School.....	John Rundle.
MISSOURI.		
Cape Girardeau.....	State Normal School	W. S. Dearmont.
Kirksville.....	State Normal School (first district).	John R. Kirk.
St. Louis.....	Normal and High School.....	William J. S. Bryan.
Warrensburg.....	State Normal School (second district).	E. B. Craighead.
MONTANA.		
Dillon.....	Montana Normal School	Henry H. Swain.
NEBRASKA.		
Peru.....	Nebraska State Normal Training School.	W. A. Clark.
NEW HAMPSHIRE.		
Plymouth.....	State Normal School	J. E. Klock.
NEW JERSEY.		
Newark.....	Newark Normal and Training School.	W. S. Willis.
Paterson.....	Paterson Normal Training School..	Jefferson R. Potter.
Trenton.....	New Jersey State Normal and Model Schools.	James M. Green.
NEW MEXICO.		
Las Vegas.....	New Mexico Normal University....	Edgar L. Hewett.
Silver City.....	Normal School of New Mexico.....	C. M. Light.
NEW YORK.		
Albany.....	New York State Normal College..	Wm. J. Milne.
Brockport.....	State Normal and Training School.	Charles T. McFarlane.
Brooklyn.....	Training School for Teachers.....	John Gallagher.
Buffalo.....	Buffalo Normal School	James M. Cassety.
Cortland.....	State Normal and Training School.	Francis J. Cheney.
Fredonia.....	.....do.....	F. B. Palmer.
Geneseo.....	Geneseo State Normal School	John M. Milne.
Jamaica.....	Normal and Training School.....	A. C. McLachlan.
New Paltz.....	State Normal School	Myron T. Scudder.
New York.....	New York Training School for Teachers.	A. S. Downing.
Do.....	Normal College of the City of New York.	Thomas Hunter.
Oneonta.....	State Normal School	Percy I. Bugbee.

IV.—PRINCIPALS OF NORMAL SCHOOLS—Continued.

Public normal schools—Continued.

Location.	Name of institution.	Principal.
NEW YORK—continued.		
Oswego	Oswego State Normal and Training School.	Isaac B. Poucher.
Plattsburg	State Normal School	Geo. K. Hawkins.
Potsdam	State Normal and Training School.	Thomas B. Stowell.
Syracuse	Syracuse High School, Normal Department.	G. A. Lewis.
NORTH CAROLINA.		
Elizabeth City	State Colored Normal School	P. W. Moore.
Fayetteville	do	E. E. Smith.
Franklinton	Albion Academy and State Normal School.	Rev. J. A. Savage.
Goldsboro	State Normal School	Henry E. Hogans.
Greensboro	State Normal and Industrial School.	Charles D. McIver.
Plymouth	Plymouth State Normal School	Chas. M. Eppes.
NORTH DAKOTA.		
Mayville	State Normal School	Joseph Carhart.
Valley City	do	George A. McFarland.
OHIO.		
Cleveland	Cleveland Normal and Training School.	J. W. McGilvrey.
Columbus	Columbus Normal School	Margaret W. Sutherland.
Dayton	Dayton Normal School	Grace A. Greene.
OKLAHOMA.		
Alva	Northwestern Territory Normal School.	James E. Ament.
Edmond	Territorial Normal School of Oklahoma.	Edmund H. Murdaugh.
Langston	Colored Agricultural and Normal University.	Inman E. Page.
OREGON.		
Ashland	Southern Oregon State Normal School.	Willis M. Clayton.
Drain	Central Oregon State Normal School.	J. H. Orcutt.
Monmouth	State Normal School	P. L. Campbell.
Weston	Eastern State Normal School	J. A. Beattie.
PENNSYLVANIA.		
Bloomsburg	State Normal School	Judson P. Welsh.
California	Southwestern State Normal School.	Theo. B. Noss.
Clarion	Clarion State Normal School	A. J. Davis.
East Stroudsburg	East Stroudsburg State Normal School.	George P. Bible.
Edinboro	State Normal School	John F. Bigler.
Indiana	Indiana Normal School of Pennsylvania.	D. J. Waller, jr.
Kutztown	Keystone State Normal School	A. C. Rothermel.
Lockhaven	Central State Normal School	J. R. Flickinger.
Mansfield	Mansfield State Normal School	Andrew T. Smith.
Millersville	First Pennsylvania State Normal School.	E. Oram Lyte.
Philadelphia	Philadelphia Normal School for Girls.	J. M. Willard.
Pittsburg	Pittsburg High School, Normal Department.	Jane Ralston.
Shippensburg	Cumberland Valley State Normal School.	G. M. D. Eckels.
Slippery Rock	Slippery Rock State Normal School.	Albert E. Maltby.
Westchester	State Normal School	George M. Philips.
RHODE ISLAND.		
Providence	Rhode Island State Normal School.	Charles S. Chapin.
SOUTH CAROLINA.		
Rockhill	Winthrop Normal College	D. B. Johnson.
SOUTH DAKOTA.		
Madison	State Normal School	W. H. H. Beadle.
Spearfish	do	F. L. Cook.
Springfield	do	J. S. Frazee.

IV.—PRINCIPALS OF NORMAL SCHOOLS—Continued.

Public normal schools—Continued.

Location.	Name of institution.	Principal.
TENNESSEE.		
Nashville	Peabody Normal School	James D. Porter.
TEXAS.		
Denton	North Texas Normal School	J. S. Kendall.
Detroit	Detroit Normal School	R. M. Parker.
Huntsville	Sam Houston Normal Institute	H. C. Pritchett.
Prairie View	Prairie View State Normal and Industrial College.	Ed. L. Blackshear.
UTAH.		
Cedar City	Southern Branch of the State Normal School.	Milton Bennion.
VERMONT.		
Castleton	State Normal School	Philip R. Leavenworth.
Johnson	do	John L. Alger.
Randolph Center	do	Edward Conant.
VIRGINIA.		
Farmville	State Female Normal School	Robert Frazer.
Hampton	Hampton Normal and Agricultural Institute.	H. B. Frissell.
Petersburg	Virginia Normal and Collegiate Institute.	J. H. Johnston.
WASHINGTON.		
Cheney	State Normal School	J. H. Miller.
Ellensburg	do	W. E. Wilson.
WEST VIRGINIA.		
Athens	West Virginia State Normal School.	J. Walter Barnes.
Fairmont	Fairmont State Normal School	John C. Shaw.
Glenville	State Normal School	Lawrence J. Corbly.
Huntington	Marshall College, State Normal School.	J. McH. Jones.
Institute	West Virginia Colored Institute	E. P. Goodwin.
Shepherdstown	Shepherd College, State Normal School.	James M. Skinner.
West Liberty	West Liberty State Normal School.	
WISCONSIN.		
Milwaukee	State Normal School	Charles McKenney.
Oshkosh	do	R. H. Halsey.
Platteville	do	D. McGregor.
River Falls	River Falls State Normal School	W. J. Brier.
Stephens Point	State Normal School	Theron B. Pray.
Wausau	Marathon County Training School	O. E. Wells.
West Superior	Superior State Normal School	J. C. McNeill.
Whitewater	State Normal School	Albert Salisbury.

Private normal schools.

ALABAMA.		
Huntsville	Central Alabama Academy	A. W. McKinney.
Mobile	Emerson Normal Institute	Rev. A. T. Burnell.
Tuskegee	Tuskegee Normal and Industrial Institute.	B. T. Washington.
ARKANSAS.		
Jamestown	Arkansas Normal College	J. L. Graham.
Mount Ida	Mount Ida Normal Academy	A. J. Denton.
Pea Ridge	Pea Ridge Normal College	B. H. Caldwell.
Sulphur Rock	Sulphur Rock College	J. W. Decker.
CALIFORNIA.		
Oakland	Gilson's Normal and Special Training School.	J. C. Gilson.
COLORADO.		
Denver	Denver Normal and Preparatory School.	Fred. Dick.
DISTRICT OF COLUMBIA.		
Washington	Kindergarten Normal Training School.	Miss Susan P. Pollock.
Do	Woman's League Kindergarten Training School.	Mrs. Anna E. Murray.

IV.—PRINCIPALS OF NORMAL SCHOOLS—Continued.

Private normal schools—Continued.

Location.	Name of institution.	Principal.
FLORIDA.		
Jasper	Jasper Normal Institute	Wm. A. Cate.
Orange Park	Orange Park Normal and Manual Training School.	Rev. Stephen G. Butcher.
GEORGIA.		
Augusta	Haines Manual and Industrial Institute.	Miss Lucy C. Laney.
Cornelia	Cornelia Normal Institute	A. E. Booth.
Douglas	Southern Normal School	J. M. Guilliams.
Macon	Ballard Normal School	George C. Burrage.
Thomasville	Allen Normal and Industrial School.	Abbie B. Howland.
ILLINOIS.		
Addison	German Evangelical Lutheran Teachers' Seminary.	E. A. W. Krauss.
Bushnell	Western Normal College	W. W. Earnest.
Dixon	Northern Illinois Normal School.	J. B. Dille.
Galesburg	Galesburg Kindergarten Normal School.	M. Evelyn Strong.
Hoopeston	Greer College	J. M. Clary.
Macomb	Western Illinois Normal School and Business Institute.	I. F. Meyer.
Oregon	Wells School for Teachers	H. W. Sullivan.
Rushville	Rushville Normal and Business College.	Maxwell Kennedy.
INDIANA.		
Angola	Tri-State Normal School	L. M. Sniff.
Cowdon	Ohio Valley Normal School	E. S. Hallett.
Covington	Indiana Normal School	Olive E. Coffeen.
Danville	Central Normal College	Jonathan Rigdon.
Indianapolis	Indiana Kindergarten and Primary Normal Training School.	Eliza A. Blaker.
Marion	Marion Normal College	C. W. Boucher.
Muncie	Eastern Indiana Normal University	F. A. Z. Kumler.
Rochester	Rochester Normal University	Wm. H. Banta.
Valparaiso	Northern Indiana Normal School	H. B. Brown.
IOWA.		
Bloomfield	Southern Iowa Normal, Scientific, and Business Institute.	A. A. Williams.
Denison	Denison Normal School	W. C. Van Ness.
Humboldt	Humboldt College	J. P. Peterson.
Lemars	Lemars Normal College	Herman H. Thoren.
Newton	Newton Normal College	G. W. Wormley.
Perry	Perry Normal School	Will M. Tarr.
Shenandoah	Western Normal College, Shenandoah Commercial Institute and Musical Conservatory.	J. M. Hussey.
Waukon	Waukon Business College and Normal School.	J. E. Mills.
KANSAS.		
Conway Springs	Normal and Business College	S. D. Crane.
Great Bend	Central Normal College	James N. Clark.
Marysville	Modern Normal College	J. G. Ellenbecker.
Nickerson	Nickerson Normal College	Ed. B. Smith.
KENTUCKY.		
Blaine	Blaine Normal School	G. Milton Elam.
Bowling Green	Bowling Green Business College and Southern Normal School.	H. H. Cherry.
Hardinsburg	Breckinridge Normal College	D. L. Robberts.
Lexington	Chandler Normal School	Fannie J. Webster.
Madisonville	Western Kentucky Normal School.	H. Evelyn Brooks.
Middleburg	Middleburg Normal College	J. W. Davis.
Morehead	Morehead Normal School	F. C. Button.
Waddy	Central Normal College	R. A. Burton.
MARYLAND.		
Ammendale	Ammendale Normal Institute	Brother Austin.
Baltimore	Baltimore Normal School (colored).	George Harrison.
Buckeystown	Buckeystown Normal Training School.	F. R. Neighbours.

IV.—PRINCIPALS OF NORMAL SCHOOLS—Continued.

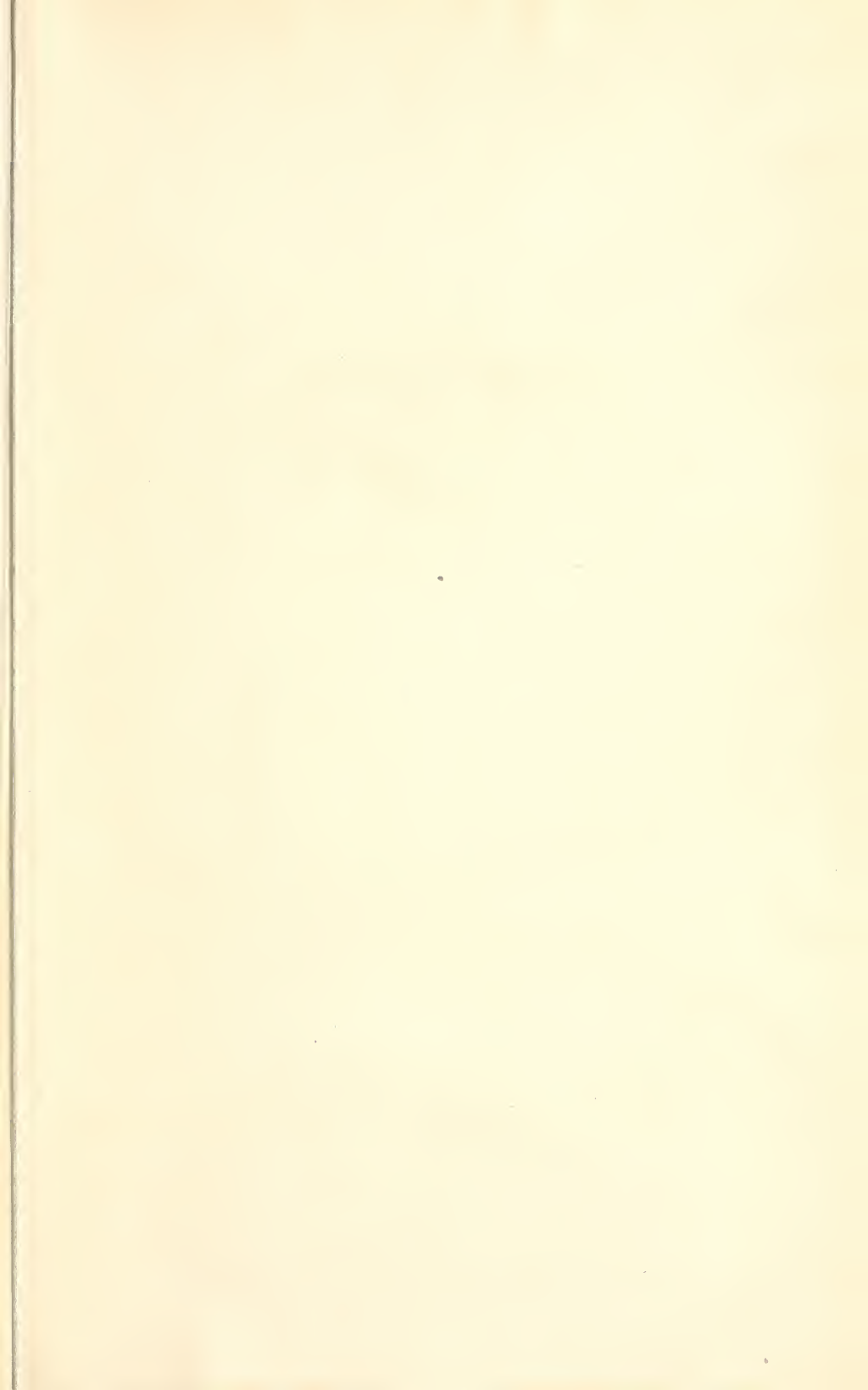
Private normal schools—Continued.

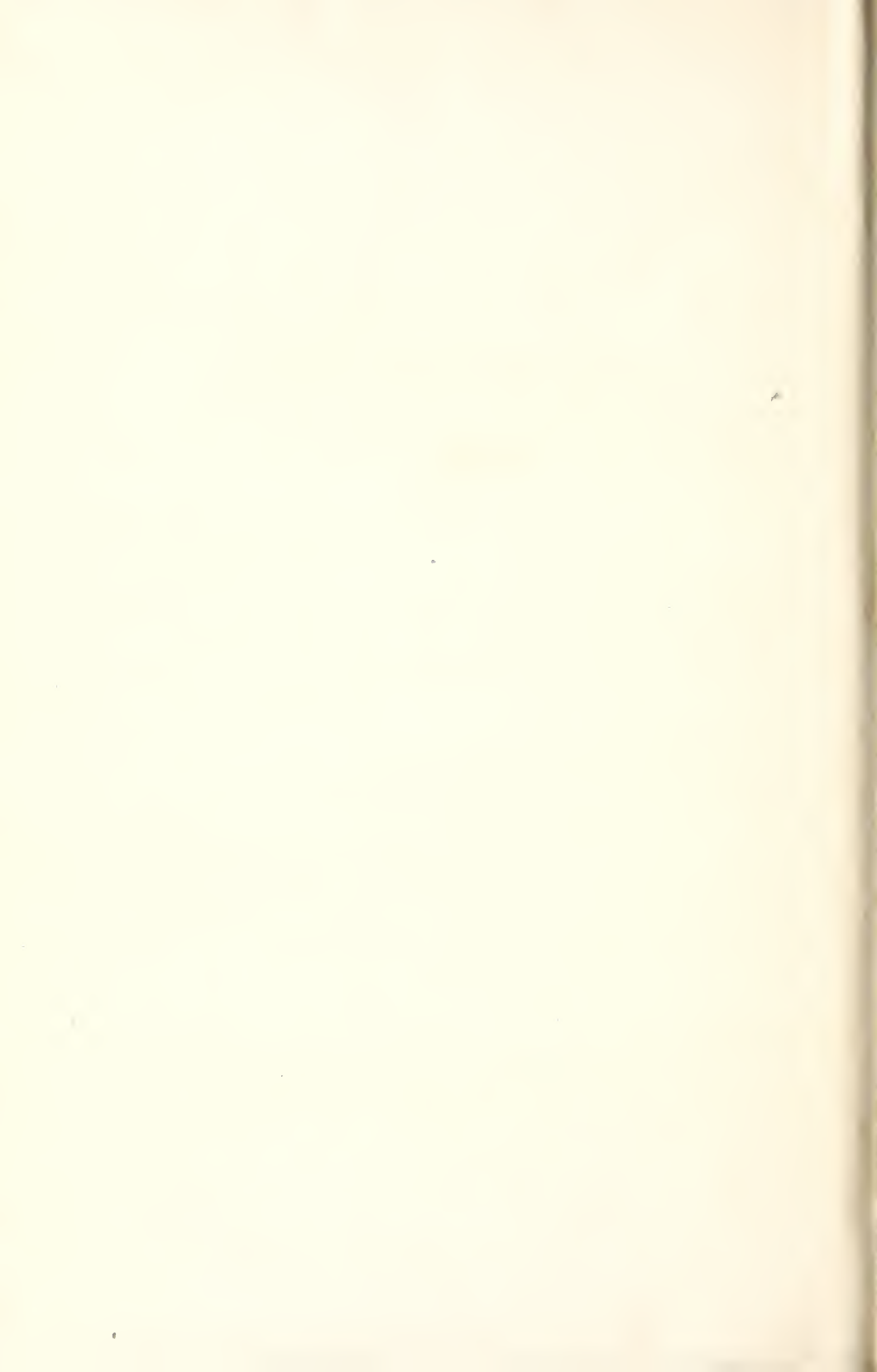
Location.	Name of institution.	Principal.
MASSACHUSETTS.		
Boston (1069 Boylston).....	Froebel School, Kindergarten Nor- mal Classes.	Annie C. Rust.
Boston	Kindergarten Training School	Lucy Wheelock.
Waltham	Notre Dame Training School	Sister Georgiana.
MICHIGAN.		
Owosso	Oakside School	Mrs. L. E. Gould.
Petoskey	Graves Normal Academy	M. O. Graves.
MINNESOTA.		
Madison	Normal School of the United Nor- wegian Lutheran Church.	O. Lokensgaard.
New Ulm	Dr. Martin Luther College	John Schaller.
MISSISSIPPI.		
Burgess	Burgess Normal Institute	Cuthbert Spencer.
Iuka	Iuka Normal College	H. A. Dean.
Poplar Springs	Poplar Springs Normal College	John D. Mitchell.
Shelby	Shelby Normal School	J. M. Williamson.
Tougaloo	Normal Department Tougaloo Uni- versity.	Frank G. Woodworth.
MISSOURI.		
Chillicothe	Chillicothe Normal Business and Shorthand College.	Allen Moore.
Gainesville	Gainesville Normal School	A. P. Selsor.
Mill Spring	Hales College	W. H. Hale.
Pleasant Hope	Pleasant Hope Normal Academy	J. M. Ricks.
Stanberry	Stanberry Normal School	D. S. Robbins.
NEBRASKA.		
Fremont	Fremont Normal School	W. H. Clemmons.
Santee	Santee Normal Training School	Alfred L. Riggs.
Wayne	Nebraska Normal College	J. M. Pile.
NEW YORK.		
New York	Teachers' College	James E. Russell.
NORTH CAROLINA.		
Asheville	Normal and Collegiate Institute	Rev. Thos. Lawrence.
Liberty	Liberty Normal College	Thos. C. Amick.
Lumberton	Whitin Normal School	D. P. Allen.
Raleigh	St. Augustine's School	Rev. A. B. Hunter.
Wilmington	Gregory Normal Institute	Geo. A. Woodward.
Winton	Waters Normal Institute	C. S. Brown.
NORTH DAKOTA.		
Grand Forks	Northwestern Normal College	John J. Swengel.
OHIO.		
Ada	Ohio Normal University	H. S. Lehr.
Canfield	Northeastern Ohio Normal College	James B. Bowman.
Dayton	St. Mary's Academy	Brother Michael.
Ewington	Ewington Academy	F. F. Vale.
Fayette	Fayette Normal University	P. C. Palmer.
Lebanon	National Normal University	J. W. Withers.
Middlepoint	Western Ohio Normal School	P. S. Morgan.
New Philadelphia	John P. Kuhn's Normal School	John P. Kuhn.
Tremont City	Western Normal University	B. L. Barr.
Woodville	Teachers' Seminary	Theo. Mees.
PENNSYLVANIA.		
Ebensburg	Ebensburg Normal Institute	H. T. Jones.
Muncy	Lycoming County Normal School	G. B. Milnor.
Pittsburg	Curry College	G. H. Kane.
SOUTH CAROLINA.		
Charleston	Avery Normal Institute	Morrison A. Holmes.
Do	Wallingford Academy	Rev. David Brown.
Frogmore	Penn Normal and Industrial School	Miss Ellen Murray.
Greenwood	Brewer Normal School	Rev. J. M. Robinson.
Lancaster	Lancaster Normal and Industrial Institute.	M. D. Lee.

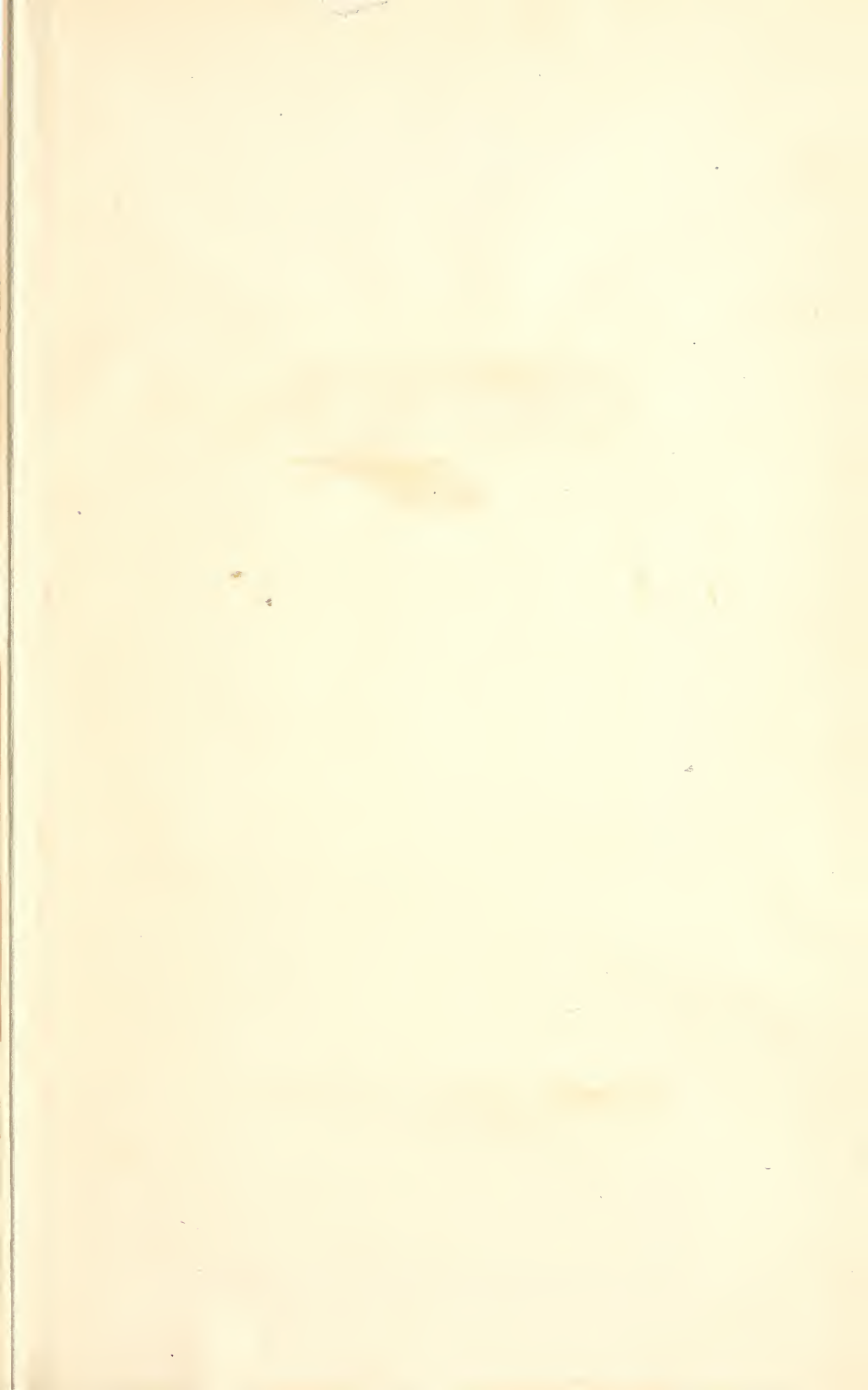
IV.—PRINCIPALS OF NORMAL SCHOOLS—Continued.

Private normal schools—Continued.

Location.	Name of institution.	Principal.
SOUTH DAKOTA.		
Sioux Falls	Lutheran Normal School.....	Rev. A. Mikkelsen.
TENNESSEE.		
Chattanooga.....	Chattanooga Normal University...	H. M. Evans.
Dickson.....	Tennessee Normal School.....	T. B. Loggins.
Fountain City.....	Holbrook Normal College.....	Jas. C. Blassingame.
Greenbrier.....	Central Tennessee Normal and Commercial School.	N. J. Pritchard.
Huntingdon.....	Southern Normal University.....	J. A. Baber.
Jonesboro.....	Warner Institute.....	H. L. Peterson.
Memphis.....	Le Moyne Normal Institute.....	A. J. Steele.
Morristown.....	Morristown Normal Academy.....	Judson S. Hill.
TEXAS.		
Commerce.....	East Texas Normal College.....	W. L. Mayo.
Cumby.....	Independent Normal College.....	Geo. A. Curlee.
VIRGINIA		
Reliance.....	Shenandoah Normal College.....	M. L. Fearnow.
Richmond.....	Hartshorn Memorial College.....	Lyman B. Tefft.
Rocky Mount.....	Piedmont Normal College.....	J. P. Matthews.
Stuart.....	Stuart Normal College.....	M. W. Royall.
WEST VIRGINIA.		
Harpers Ferry.....	Storer College.....	Henry T. McDonald.
Summersville.....	Summersville Normal School.....	P. H. Murphy, J. L. Stewart.
WISCONSIN.		
Milwaukee.....	National German-American Teachers' Seminary.	Emil Dapprich.
St. Francis.....	Catholic Normal School of the Holy Family and Pio Nono College.	Rev. M. J. Locharnes.







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